



CREATE THE FUTURE

AP Computer Science Principles

The Power of Computer Science

THE INNOVATION ENGINE

From 3-D animation to medicine, fashion, engineering, visual design, finance, music production, statistical analysis, and much more, computer science powers the technology, productivity, and innovation that drives the world.

IDEAS COME TO LIFE

AP[®] Computer Science Principles (AP CSP) helps you understand how computing and technology influence the world around you. In this course, you'll create digital projects, such as games and apps, to address real-world issues in the same way writers, programmers, engineers, and designers do.

The only recommended prerequisite for taking the course is completion of Algebra 1.

Beyond Computing

AP CSP prepares you for success not only in computer science majors and careers but also in other fields. For example, computer science skills can help you:

1. Create apps to track health data and provide real-time suggestions for ways to live healthier.
2. Program models and experiments that help answer biology, physics, and sociology questions.
3. Design and build robots for use in fields like manufacturing, surgery, research, and transportation.
4. Create a website to raise awareness for causes you care about.

* from the College Board 2018 brochure, "Creative Thinkers Wanted", 00891-027

In this course, we will learn the following ***seven big ideas*** and ***computational thinking practices***:

Seven Big Ideas

- Big Idea 1: Creativity
- Big Idea 2: Abstraction
- Big Idea 3: Data and Information
- Big Idea 4: Algorithms
- Big Idea 5: Programming
- Big Idea 6: The Internet
- Big Idea 7: Global Impact

Computational Thinking Practices

- Connecting computing
- Creating computational artifacts
- Abstracting
- Analyzing problems and artifacts
- Communicating
- Collaborating

Knowing how to program is **not a prerequisite** for this course.