

Course Name: AP Computer Science Principles

Duration: 1 Semester Full Year

Grade Level: 9th 10th 11th 12th (check all that apply)

Are there any prerequisites for the course?

Computer Science Principles introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. More than a traditional introduction to programming, it is a rigorous, engaging, and approachable curriculum that explores many of the foundational ideas of computing so all students understand how these concepts are transforming the world we live in.

WHAT this course is about:

[CS Principles | Code.org](#)

WHY take this course:

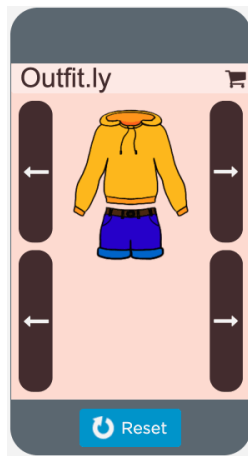
[Six different studies show](#): students who study computer science perform better in other subjects, excel at problem-solving, and are more likely to attend college.

Students who take AP Computer Science Principles, in particular, are [12% more likely to enroll in college](#) compared to similarly-situated peers, and students who take AP exams are [more likely to graduate 4-year college](#), regardless of their score on the exam. AP computer science students also earn [better AP Calculus scores](#) than comparable students who don't take AP computer science.

WHAT you'll learn:

Computer Science concepts and how to make apps using the Javascript programming language.

WHAT you'll do:



Using the JavaScript language, students learn about algorithms and program design as they create a series of real working, shareable apps with [App Lab](#).

WHERE this could take you:

The exciting fields of Computer Programming and App Development.

OPTIONAL Course Outline (“scope and sequence”, sequence chart, etc.)

- Unit 1 – Digital Information
- Unit 2 – The Internet
- Unit 3 – Intro to App Design
- Unit 4 – Variables, Conditionals, and Functions
- Unit 5 – Lists, Loops, and Traversals
- Unit 6 – Algorithms
- Unit 7 – Parameters, Return, and Libraries
- Unit 8 – Create PT Prep
- Unit 9 – Data
- Unit 10 - Cybersecurity and Global Impacts