

# Online Resources Recommended by AP Teachers

We surveyed AP Computer Science Principles teachers about what online resources they recommend, and the list below comes directly from their responses. The list also includes teacher descriptions of the resources. This is not a comprehensive list, nor is it an endorsement of any of these resources by the College Board.

## Code.org

- AP-endorsed complete curriculum; self-directed student practice
- Online resource for students that complements the AP course material well and, in some cases, “was the primary teaching source.” This curriculum “was easy to use and a lifesaver since it was my first year teaching the course.”

## Code HS

- AP-endorsed complete curriculum; self-directed student practice
- Fully packaged course, complete with lesson plans, videos, and exercises. “Amazing online course that utilizes blended learning. Material is approved by College Board and is a great prep course for AP test/Performance Tasks.”

## Khan Academy — CSP

- Self-directed student practice; instructional videos for students
- “Updated the course with content for the AP CSP 2020 – 21 standards.” Provides interactive lessons and instructional videos with summative and formative assessments.

## Edhesive

- AP-endorsed complete curriculum; self-directed student practice
- Complete online course curriculum for AP Computer Science Principles. Provide the students the “ability to work independently and remotely.”

## Albert.io

- Self-directed student practice
- Plenty of practice questions with feedback. Provides practice for the end-of-course exam.

## Computer Science Circles

- Online compiler; self-directed student practice
- Online python compiler that allows students to practice writing code. Has a feature to walk through the code that “helps illuminate what’s happening in the code.”

## CMU CS Academy

- Online course content
- Programming units in Python that are designed to be paired with the programming units on code.org, but can be used with others. “Students can easily work under direction or independently.”

## Coding Bat

- Self-directed student practice
- Provides short practice problems for programming in Python and Java.

## CS4G Netsim

- Online simulation/laboratory experiment
- Allows teachers to “simulate many important concepts regarding packets, routers, and even some cybersecurity issues such as DOS and MITM attacks.”

 = May require a fee  = Account creation needed

### CS50 AP Curriculum

- AP-endorsed complete curriculum; instructional videos for students/teachers
- “It’s entirely self-contained—videos, lessons, IDE, everything!”

### Earsketch

- Self-directed student practice
- Allows students to program using Python or JavaScript to create music. “Earsketch filled that need and all students loved the idea of creating their own song.”

### Mobile CSP

- AP-endorsed complete curriculum; self-directed student practice
- Full curriculum with lessons, self-checks, and discussion questions. Students “can complete tutorials at their own pace.”

### Python Anywhere

- Online compiler
- “This resource enables students to write Python and JavaScript on a Chromebook and share their code with each other and their instructor.”

### SQLite Viewer

- Online simulation/laboratory experiment
- A web-based implementation of the SQLite relational database. “It enables students to practice SQL queries without having to have access to a full-blown relational database management system.”

### W3 Schools

- Online instructions tutorials/resources pages for teachers/students
- Provides easy-to-understand, bite-sized tutorials for web development, as well as coding in Python, Java, C++, and C#.

### Apple

- AP-endorsed complete curriculum; self-directed student practice
- Complete curriculum using Apple Books and Xcode.

### Beauty and Joy of Computing (BJC)

- AP-endorsed complete curriculum; self-directed student practice
- Complete curriculum using Snap!

### Computer Science (CS) Matters

- AP-endorsed complete curriculum; online instructional resources for teachers
- Complete curriculum using Python.

### Project Lead the Way (PLTW)

- AP-endorsed complete curriculum; online instructional resources for teachers
- Complete curriculum using Python.

### UTeach

- AP-endorsed complete curriculum; online instructional resources for teachers
- Complete curriculum using Scratch and Python.

### Zulama by Carnegie Learning

- AP-endorsed complete curriculum; online instructional resources for teachers
- Complete curriculum using GML programming language.

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