

# AP Computer Science A

AP Computer Science A introduces students to computer science through programming. Fundamental topics include the design of solutions to problems, the use of data structures to organize large sets of data, the development and implementation of algorithms to process data and discover new information, the analysis of potential solutions, and the ethical and social implications of computing systems.

The course emphasizes object-oriented programming and design using the Java programming language. AP Computer Science A is equivalent to a first-semester, college-level course in computer science.

- Recommended Grade: 11, 12
- Prerequisites: AP Computer Science Principle or Computer Science I, Algebra II
- Credits: 2 semester course, 1 credit per semester
- Curriculum: Runstone Academy
- Language: Java
- Requirement: Chromebook or laptop, windows 10, Internet connection.

## Content

Unit 1 Getting Started and Primitive Types

Unit 2 Using Objects

Unit 3 If Statements

Unit 4 Iteration/Loops

Unit 5 Writing Classes

Unit 6 Arrays

Unit 7 ArrayLists

Unit 8 2D Arrays

Unit 9 Inheritance

Unit 10 Recursion