

COMPUTER SCIENCE DEPARTMENT ADVANCED PLACEMENT & INTERNATIONAL BACCALAUREATE COURSES

Advanced Placement Computer Science Principles

<https://apstudent.collegeboard.org/apcourse/ap-computer-science-principles>

Grade: 9-12 Course: One Year

Recommended Prerequisites:

- Completion of Algebra 1.
- 9th graders, prior computer science class in middle school.

Course Information:

In this course, you will learn the principles that underlie the science of computing and develop the thinking skills that computer scientists use. You'll work on your own and as part of a team to creatively address real-world issues using the tools and processes of computation and programming.

Advanced Placement Computer Science A

http://www.collegeboard.com/student/testing/ap/sub_compscia.html?compscia

Grade: 10-12 Course: One Year

Recommended Prerequisites:

- Completion of AP Computer Science Principles course.

Course Information:

In this course, you will be familiar with the concepts and tools of computer science as you learn a subset of the Java programming language. You'll do hands-on work to design, write, and test computer programs that solve problems or accomplish tasks.

IB HL Computer Science 2

<https://www.ibo.org/programmes/diploma-programme/curriculum/sciences/computer-science/>

Grade: 11-12 Course: One Year

Prerequisites:

- Completion of AP Computer Science A course.

Course Information:

In this course, you will learn Advance Java programming and the following topics: object-oriented programming (OOP), system fundamentals, computer organization, networks, computational thinking, problem-solving & programming, abstract data structure, resource management, control case study.