

**Virginia Board of Education  
Guidelines for the Use of Computer Science Courses to  
Satisfy Graduation Requirements**

**Code of Virginia § 22.1-253.13:4**

Approved by the Virginia Board of Education

~~On January 22, 2015~~

Revised XXXX

## Guidelines for the Use of Computer Science Courses to Satisfy Graduation Requirements

Subsection D 14 of § 22.1-253.13:4 of the *Code of Virginia* requires the Board to develop guidelines addressing how computer science courses can satisfy graduation requirements.

Pursuant to the requirements of § 22.1-253.13:4, the following guidelines will be effective for students entering the ninth grade for the first time between the 2015–2016 school year and the 2021–2022 school year:

*Advanced Placement (AP) Computer Science A* may be considered a mathematics course, a laboratory science course, or career and technical education course under the conditions outlined below. A student may apply *AP Computer Science A* coursework to only one of the aforementioned areas.

- I. For **mathematics**, *AP Computer Science A* currently provides a standard credit to satisfy graduation requirements.
- II. For **laboratory science**, *AP Computer Science A* may provide a standard credit to satisfy graduation requirements when students successfully complete laboratory science courses from the different science discipline areas in accordance with the *Regulations Establishing Standards for Accrediting Public Schools in Virginia*.\*

For *AP Computer Science A* to be applied as a standard credit for laboratory science, the course must include a significant experimental component where:

1. a testable question is developed based on a review of literature;
2. an hypothesis drives a sequential experimental design;
3. parameters are manipulated under controlled conditions to test how variables behave;
4. systematic methods of organizing derived experimental data are employed;
5. analysis of data requires statistical processes to form conclusions; and
6. conclusions and findings are formally presented, defended, and argued.

International Baccalaureate (IB) Computer Science coursework may be applied as a laboratory science as part of the recognized IB diploma requirement, which is currently governed under the 2012 SOA regulations.\*

- III. For **career and technical education**, *AP Computer Science A* may provide a standard credit to satisfy graduation requirements.

*AP Computer Science A* currently provides a student-selected verified credit for students who (i) successfully complete a career and technical education program sequence in programming or a related programming sequence **and** (ii) successfully complete either the *AP Computer Science A* examination with a score of three or higher.

Pursuant to the requirements of § 22.1-253.13:4, the following guidelines will be effective for students

entering the ninth grade for the first time in the 2022–2023 school year and thereafter:

*Advanced Placement (AP) Computer Science A* or *International Baccalaureate (IB) Computer Science* may be considered a mathematics course, a laboratory science course, or career and technical education course under the conditions outlined below. A student may apply *AP Computer Science A* or *IB Computer Science* coursework to only one of the aforementioned areas.

- I. For **mathematics**, *AP Computer Science A* or *IB Computer Science* currently provides a standard credit to satisfy graduation requirements.
- II. For **laboratory science**, *AP Computer Science A* or *IB Computer Science* may provide a standard credit to satisfy graduation requirements when students successfully complete laboratory science courses from the different science discipline areas in accordance with the [Regulations Establishing Standards for Accrediting Public Schools in Virginia](#).

For *AP Computer Science A* or *IB Computer Science* to be applied as a standard credit for laboratory science, the course must include a significant experimental component where:

1. a testable question is developed based on a review of literature;
2. an hypothesis drives a sequential experimental design;
3. parameters are manipulated under controlled conditions to test how variables behave;
4. systematic methods of organizing derived experimental data are employed;
5. analysis of data requires statistical processes to form conclusions; and
6. conclusions and findings are formally presented, defended, and argued.

- III. For **career and technical education**, *AP Computer Science A* or *IB Computer Science* may provide a standard credit to satisfy graduation requirements.

*AP Computer Science A* or *IB Computer Science* currently provides a student-selected verified credit for students who (i) successfully complete a career and technical education program sequence in programming or a related programming sequence **and** (ii) successfully complete either the *AP Computer Science A* examination with a score of three or higher or the *IB Computer Science* coursework.

*Colleges and universities have varying ways of applying computer science course credits during the admission process. Many colleges and universities do not accept computer science as a mathematics or laboratory science course on student transcripts. In all cases, teachers and school counselors must carefully advise students and parents to ensure that their high school credit-bearing course selections and graduation planning career pathways are consistent with admission standards and program requirements for post-secondary education and training.*