
A BILL FOR AN ACT

RELATING TO COMPUTER SCIENCE EDUCATION.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

1 SECTION 1. The legislature finds that the importance of
2 computer science cannot be overstated. Computers have evolved
3 to become a part of everyday life, and an introduction to
4 computer science helps students better understand their digital
5 world and become problem solvers of the future.

6 The legislature further finds that, according to the Bureau
7 of Labor Statistics, the United States will continue to be
8 transformed by technological advancements rooted in computer
9 programs and applications over the next ten years.
10 Consequently, computing-based occupations now make up more than
11 half of all projected new jobs in the science, technology,
12 engineering, and mathematics fields, commonly known as STEM
13 fields. In the last decade between 2010 and 2020, the number of
14 computer science bachelor's degrees conferred more than doubled
15 from 39,600 to 97,000, respectively, an increase of one hundred
16 forty-five per cent. This means that college graduates with



1 computer science degrees have been, and will continue to be, in
2 high demand among employers across the nation.

3 Despite this trend, national survey and research results
4 show a disparity between the demand for computer science
5 education and its availability. Although ninety per cent of
6 parents want their children's schools to teach computer science,
7 only fifty-three per cent of schools offer computer science
8 courses. Further, disparities in access and representation are
9 pronounced among traditionally underrepresented groups. For
10 example, women make up just one-third of high school computer
11 science students nationally.

12 In 2018, the legislature found a similar disparity at the
13 state level. To address this, the legislature passed Act 51,
14 Session Laws of Hawaii 2018, which mandated that all public high
15 schools offer at least one computer science course by the 2021-
16 2022 school year. In 2021, the legislature further expanded
17 those computer science course requirements to elementary,
18 middle, and intermediate schools by enacting Act 158, Session
19 Laws of Hawaii 2021. As a result, excluding "combo" schools,
20 which are schools with combined grade bands, such as Lanai high
21 and elementary school, one hundred per cent of public high



1 schools now offer a foundational computer science course,
2 exceeding the national average, and forty-two per cent of all
3 public schools offer a computer science course.

4 Despite the success in expanding access to computer science
5 courses since 2018, the State has still fallen short on its
6 enrollment goals for these courses. According to the department
7 of education's Annual Report on Computer Science Courses and
8 Computer Science Content, published in November 2022, just
9 fourteen per cent of unique students were enrolled in a computer
10 science course, with sixteen per cent of those students
11 comprising those in high school. Notably, data isolating the
12 percentage of high school students enrolled out of total high
13 school students in the State was not provided by the report. In
14 sum, the legislature finds that promoting computer science
15 education remains a statewide necessity.

16 Accordingly, the purpose of this Act is to require the
17 board of education to:

18 (1) Work with the department of education to conduct an
19 analysis on the necessary timeline and appropriate
20 process for implementation of making computer science



1 a graduation requirement by no later than the 2030-
2 2031 school year;

3 (2) Based on its analysis, determine whether making
4 computer science a graduation requirement would be in
5 the best interests of public school students and the
6 public;

7 (3) Make a determination on how students could be allowed
8 to complete computer science courses as a substitute
9 for core academic courses to satisfy graduation credit
10 requirements, beginning with the 2024-2025 school
11 year; and

12 (4) Report to the legislature on its findings and
13 recommendations.

14 SECTION 2. (a) The board of education shall work with the
15 department of education to analyze the necessary timeline and
16 appropriate process for making computer science a graduation
17 requirement by no later than the 2030-2031 school year.

18 (b) The board of education shall determine whether making
19 computer science a graduation requirement would be in the best
20 interests of public school students and the public, based on the
21 analysis conducted pursuant to subsection (a).



1 (c) The board of education shall make a determination on
2 how students can be allowed to complete computer science courses
3 as a substitute for core academic courses to satisfy graduation
4 credit requirements, beginning with the 2024-2025 school year.

5 (d) The board of education shall submit a report of its
6 findings and recommendations, including proposed legislation, to
7 the legislature no later than twenty days prior to the convening
8 of the regular session of 2024.

9 SECTION 3. This Act shall take effect on July 1, 2023.



Report Title:

Computer Science; Board of Education; Department of Education; Graduation Requirements; Analysis; Report; Teacher Development

Description:

Requires the Board of Education to work with the Department of Education to conduct an analysis on the necessary timeline and appropriate process for making computer science a graduation requirement by no later than the 2030-2031 school year.

Requires the Board of Education to determine whether making computer science a graduation requirement would be in the best interests of public school students and the public. Requires the Board of Education to make a determination on how students could be allowed to complete computer science courses as a substitute for core academic courses to satisfy graduation credit requirements, beginning with the 2024-2025 school year. Requires a report to the Legislature. (CD1)

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