

SECOND REGULAR SESSION
HOUSE COMMITTEE SUBSTITUTE FOR
HOUSE BILL NO. 1457
99TH GENERAL ASSEMBLY

4037H.03C

D. ADAM CRUMBLISS, Chief Clerk

AN ACT

To amend chapter 170, RSMo, by adding thereto one new section relating to computer science education.

Be it enacted by the General Assembly of the state of Missouri, as follows:

Section A. Chapter 170, RSMo, is amended by adding thereto one new section, to be
2 known as section 170.035, to read as follows:

170.035. 1. For purposes of this section, the following terms mean:

2 **(1) "Computer programming", the writing and implementation of low-level and**
3 **high-level languages that can be translated into machine language and then executed by**
4 **a computer;**

5 **(2) "Computer science", the study of computers and algorithmic processes,**
6 **including their principles, their hardware and software designs, their implementation, and**
7 **their impact on society.**

8 **2. In every school year after the 2019-20 school year, each school district shall offer**
9 **a course on computer science with an emphasis in computer programming to all students**
10 **attending high school in its district. If the course is a year-long course, the course shall**
11 **include at least twenty hours of instruction in computer programming.**

12 **3. Each school district shall:**

13 **(1) Develop its own curriculum for the computer science course;**

14 **(2) Use a curriculum already established for a computer science course it offered**
15 **before the effective date of this section; or**

16 **(3) Use a curriculum for any computer science course, including any virtual or**
17 **online computer science course, developed by the department of elementary and secondary**
18 **education.**

EXPLANATION — Matter enclosed in bold-faced brackets [thus] in the above bill is not enacted and is intended to be omitted from the law. Matter in **bold-face** type in the above bill is proposed language.

19 **4. The department of elementary and secondary education shall, before July 1,**
20 **2020, develop a high school graduation policy that allows a student to fulfill one unit of**
21 **academic credit with the computer science course described under subsection 2 of this**
22 **section for any elective or practical arts unit required by the state for high school**
23 **graduation. The policy shall also specify that a student may elect for the computer science**
24 **course not to count as an elective or practical arts unit but instead to count as a**
25 **mathematics or science unit required by the student's district for high school graduation.**
26 **A school district shall count the computer science course as a mathematics unit required**
27 **by the district for high school graduation if the student earns three units of academic credit**
28 **in mathematics in addition to the computer science course. A school district shall count**
29 **the computer science course as a science unit required by the district for high school**
30 **graduation if the student earns three units of academic credit in science in addition to the**
31 **computer science course. A student shall be prohibited from earning credits in more than**
32 **one subject area for the computer science course. A student shall earn one unit of**
33 **academic credit for the computer science course only if the course meets for the number**
34 **of minutes required by the department of elementary and secondary education for a one-**
35 **unit credit course.**

36 **5. Students shall not be required to complete the computer science course described**
37 **under subsection 2 of this section in order to graduate from high school.**

38 **6. The computer science course described under subsection 2 of this section shall**
39 **be taught by a teacher who holds a certificate of license to teach under section 168.021.**
40 **Any other requirements related to the qualifications of the teacher or type of certificate**
41 **shall be determined by each school district.**

42 **7. The computer science course described under subsection 2 of this section may**
43 **be taught in any of the school district's facilities or at any location approved by the school**
44 **district.**

45 **8. Each school district may offer the computer science course required to be offered**
46 **under subsection 2 of this section as an online course or through videoconferencing so long**
47 **as a teacher who holds a certificate of license to teach under section 168.021 supervises the**
48 **delivery of the content to students.**

49 **9. The department of elementary and secondary education shall develop a virtual**
50 **course or contract with an outside vendor to develop a virtual course that meets the**
51 **requirements of section 162.1250 and the requirements for the computer science course**
52 **described under subsection 2 of this section. School districts may offer such virtual course**
53 **in accordance with the provisions of section 162.1250. The department of elementary and**
54 **secondary education shall not charge any school district a fee in order to offer such virtual**

55 course. Any school district offering such virtual course shall be deemed to have met the
56 requirements of subsection 2 of this section.

57 **10. (1) Before July 1, 2019, the state board of education shall convene a work group**
58 **to develop and recommend academic performance standards relating to computer science.**
59 **The state board of education and the work group shall follow the procedures and conduct**
60 **the public hearings required by section 160.514. The state board of education shall develop**
61 **written curriculum frameworks relating to computer science that may be used by school**
62 **districts in accordance with section 160.514.**

63 **(2) The state board of education shall adopt and implement academic performance**
64 **standards relating to computer science beginning in the 2020-21 school year. Any**
65 **standards relating to computer science adopted before the effective date of this section shall**
66 **continue in effect until the state board of education adopts and implements the new**
67 **academic performance standards required by this section.**

68 **11. Before July 1, 2019, the state board of education shall develop a procedure by**
69 **which any teacher who holds a certificate of license to teach under section 168.021 and**
70 **demonstrates sufficient content knowledge of computer science, as determined by the state**
71 **board of education, shall receive a special endorsement on his or her license signifying his**
72 **or her specialized knowledge in computer science.**

73 **12. The department of elementary and secondary education shall promulgate rules**
74 **to implement the provisions of this section. Any rule or portion of a rule, as that term is**
75 **defined in section 536.010, that is created under the authority delegated in this section shall**
76 **become effective only if it complies with and is subject to all of the provisions of chapter**
77 **536 and, if applicable, section 536.028. This section and chapter 536 are nonseverable, and**
78 **if any of the powers vested with the general assembly pursuant to chapter 536 to review,**
79 **to delay the effective date, or to disapprove and annul a rule are subsequently held**
80 **unconstitutional, then the grant of rulemaking authority and any rule proposed or adopted**
81 **after August 28, 2018, shall be invalid and void.**

✓