

By: Representatives Zuber, Stamps

To: Education

COMMITTEE SUBSTITUTE
FOR
HOUSE BILL NO. 818

1 AN ACT TO AMEND SECTION 37-13-205, MISSISSIPPI CODE OF 1972,
2 TO AUTHORIZE CERTIFIED OR CLASSIFIED STAFF TO PROVIDE INSTRUCTION
3 IN COMPUTER SCIENCE IN THE PUBLIC SCHOOLS; TO AMEND SECTION
4 37-13-207, MISSISSIPPI CODE OF 1972, TO ENCOURAGE SCHOOL DISTRICTS
5 TO DESIGNATE A CENTRAL LOCATION FOR THE DELIVERY OF INSTRUCTION
6 AND COURSES IN COMPUTER SCIENCE FOR ALL STUDENTS IN THE DISTRICT;
7 TO AMEND SECTION 37-13-211, MISSISSIPPI CODE OF 1972, TO DESIGNATE
8 CERTIFIED OR CLASSIFIED STAFF AS ADDITIONAL SCHOOL EMPLOYEES WHO
9 ARE TO BE PROVIDED ANNUAL TRAINING IN THE COMPUTER SCIENCE
10 CURRICULUM; TO BRING FORWARD SECTION 37-13-213, MISSISSIPPI CODE
11 OF 1972, WHICH REQUIRES THE BOARD OF TRUSTEES OF STATE
12 INSTITUTIONS OF HIGHER LEARNING TO WORK WITH THE INSTITUTIONS OF
13 HIGHER LEARNING TO IDENTIFY TEACHER PREPARATION PROGRAMS LEADING
14 TO CERTIFICATION IN THE COMPUTER SCIENCE FIELD, FOR PURPOSES OF
15 POSSIBLE AMENDMENT; AND FOR RELATED PURPOSES.

16 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MISSISSIPPI:

17 **SECTION 1.** Section 37-13-205, Mississippi Code of 1972, is
18 amended as follows:

19 37-13-205. As used in Sections 37-13-201 through 37-13-213,
20 the following terms shall have the meaning ascribed in this
21 section:

22 (a) "Computer science" means the study of computers,
23 algorithmic processes, coding, and logical thinking, including



24 computer principles, their hardware and software designs, their
25 implementation and their impact on society.

26 (b) "Computer science courses" means high school and
27 middle school courses that teach computer science as stand-alone
28 implementations; and elementary curriculum that provides
29 instruction in computer science as stand-alone implementations or
30 embedded in other subjects and focuses on how to create and
31 understand technology, rather than simply using technology.

32 (c) "Offer" means providing instruction at the
33 elementary level with licensed teachers or certified or classified
34 staff, and at the high school and middle school level as a course
35 taught by a computer science teacher or certified staff:

36 (i) Who is onsite at the physical location of the
37 school; or

38 (ii) Who is not onsite at the physical location of
39 the school but conducts the course through virtual means with a
40 proctor onsite at the physical location of the school.

41 **SECTION 2.** Section 37-13-207, Mississippi Code of 1972, is
42 amended as follows:

43 37-13-207. (1) The State Department of Education is
44 authorized and directed to implement a K-12 computer science
45 curriculum based on the 2018 Mississippi College and
46 Career-Readiness Standards for computer science, which includes
47 instruction in, but not limited to:

48 (a) Computational thinking;



- 49 (b) Problem solving;
- 50 (c) Programming;
- 51 (d) Cyber security;
- 52 (e) Data science;
- 53 (f) Robotics;
- 54 (g) Artificial intelligence and machine learning; and
- 55 (h) Other computer science and cyber-related content.

56 (2) The State Department of Education shall work with the
57 Center for Cyber Education at Mississippi State University to
58 identify and develop the K-12 computer science curriculum and
59 delivery options.

60 (3) Beginning in the 2022-2023 school year:

61 (a) Each local school district shall provide that all
62 middle schools in its school system offer instruction in
63 foundations of computer science;

64 (b) Each local school district shall provide that fifty
65 percent (50%) of elementary schools in its school system offer a
66 minimum of one (1) hour of instruction in computer science each
67 week;

68 (c) Each charter school that serves middle or high
69 school students shall offer a course in computer science; and

70 (d) Each charter school that serves elementary school
71 students shall offer instruction in computer science.

72 (4) Beginning in the 2023-2024 school year:



73 (a) Each local school district shall provide that at
74 least fifty percent (50%) of the high schools in its school system
75 offer a course in computer science;

76 (b) Each local school district shall provide that all
77 elementary schools in its school system offer a minimum of one (1)
78 hour of instruction in exploratory computer science each week.

79 (5) Beginning in the 2024-2025 school year, each local
80 school district shall provide that all schools in its school
81 system offer instruction in computer science.

82 (6) Each local school district is encouraged, to the extent
83 possible, to designate a central location within the school
84 district which may be used to provide the courses and instruction
85 required under this section to all students at all grade levels in
86 the district.

87 **SECTION 3.** Section 37-13-211, Mississippi Code of 1972, is
88 amended as follows:

89 37-13-211. (1) Subject to appropriations made by the
90 Legislature, the State Department of Education shall provide
91 annual training for teachers, counselors * * *, administrators and
92 other certified or classified staff in order to phase in the K-12
93 computer science curriculum. Preference should be given to
94 districts who have the fewest number of teachers or staff trained
95 in computer science. The State Department of Education shall work
96 with the Center for Cyber Education at Mississippi State
97 University to develop and coordinate * * * the training. The



98 State Department of Education may contract with private and
99 nonprofit providers for * * * educator training and for student
100 instruction, and is encouraged to utilize available cost-free
101 computer training, instruction and resources. Teachers and other
102 certified and classified staff may receive computer science
103 instruction training through an online platform.

104 (2) The State Department of Education shall provide a report
105 by January 1, 2022, to the Governor, the Lieutenant Governor, the
106 Speaker of the House of Representatives, the Chairman of the
107 Senate Education Committee and the Chairman of the House Education
108 Committee. The report shall include a strategic plan for
109 statewide computer science education initiatives including, but
110 not limited to, the following:

111 (i) A summary of the current state landscape for
112 K-12 computer science education;

113 (ii) A plan for expanding computer science
114 education opportunities to every school in the state by the
115 2024-2025 school year;

116 (iii) A plan for the development of preservice and
117 in-service teachers seeking a computer science endorsement or
118 course specific license, in order to meet the timeline for course
119 requirements;

120 (iv) The development of a vetted list of approved
121 vendors in computer science education that are recognized as high



122 quality computer science courses or instruction, which should
123 weigh preference on cost and ease of implementation; and

124 (v) The identification of approved computer
125 science courses that may fulfill at least four (4) units of
126 academic credit for high school graduation. The State Department
127 of Education shall work with the Board of Trustees of State
128 Institutions of Higher Learning and the Mississippi Community
129 College Board to approve these courses once identified.

130 (* * *3) The State Department of Education shall submit a
131 report by December 31 of each year through 2025 to the Governor,
132 the Lieutenant Governor, the Speaker of the House of
133 Representatives, the Chairman of the Senate Education Committee
134 and the Chairman of the House Education Committee. The report
135 shall include a list of schools in each district teaching computer
136 science and the number of computer science teachers and certified
137 or classified staff who are trained in each district.

138 **SECTION 4.** Section 37-13-213, Mississippi Code of 1972, is
139 brought forward as follows:

140 37-13-213. The Board of Trustees of State Institutions of
141 Higher Learning shall work with its member institutions to
142 identify preservice teacher preparation programs to allow for
143 certification in the computer science field.

144 **SECTION 5.** This act shall take effect and be in force from
145 and after July 1, 2022.

