To: Education

By: Representatives Zuber, Stamps

HOUSE BILL NO. 818

AN ACT TO AMEND SECTION 37-13-205, MISSISSIPPI CODE OF 1972,

TO AUTHORIZE CERTIFIED OR CLASSIFIED STAFF TO PROVIDE INSTRUCTION IN COMPUTER SCIENCE IN THE PUBLIC SCHOOLS; TO AMEND SECTION 37-13-207, MISSISSIPPI CODE OF 1972, TO ENCOURAGE SCHOOL DISTRICTS 5 TO DESIGNATE A CENTRAL LOCATION FOR THE DELIVERY OF INSTRUCTION AND COURSES IN COMPUTER SCIENCE FOR ALL STUDENTS IN THE DISTRICT; TO AMEND SECTION 37-13-211, MISSISSIPPI CODE OF 1972, TO DESIGNATE 7 CERTIFIED OR CLASSIFIED STAFF AS ADDITIONAL SCHOOL EMPLOYEES WHO 8 9 ARE TO BE PROVIDED ANNUAL TRAINING IN THE COMPUTER SCIENCE CURRICULUM; TO BRING FORWARD SECTION 37-13-213, MISSISSIPPI CODE 10 OF 1972, WHICH REQUIRES THE BOARD OF TRUSTEES OF STATE 11 12 INSTITUTIONS OF HIGHER LEARNING TO WORK WITH THE INSTITUTIONS OF 13 HIGHER LEARNING TO IDENTIFY TEACHER PREPARATION PROGRAMS LEADING TO CERTIFICATION IN THE COMPUTER SCIENCE FIELD, FOR PURPOSES OF 14 POSSIBLE AMENDMENT; AND FOR RELATED PURPOSES. 15 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MISSISSIPPI: 16 17 SECTION 1. Section 37-13-205, Mississippi Code of 1972, is amended as follows: 18 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 "Computer science" means the study of computers,

algorithmic processes, coding, and logical thinking, including

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- 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 or classified
- 36 staff:
- 37 (i) Who is onsite at the physical location of the
- 38 school; or
- 39 (ii) Who is not onsite at the physical location of
- 40 the school but conducts the course through virtual means with a
- 41 proctor onsite at the physical location of the school.
- 42 **SECTION 2.** Section 37-13-207, Mississippi Code of 1972, is
- 43 amended as follows:
- 44 37-13-207. (1) The State Department of Education is
- 45 authorized and directed to implement a K-12 computer science
- 46 curriculum based on the 2018 Mississippi College and
- 47 Career-Readiness Standards for computer science, which includes
- 48 instruction in, but not limited to:

49 (a) Computational thinking; 50 Problem solving; (b) 51 Programming; (C) 52 Cyber security; (d) Data science; 53 (e) 54 (f) Robotics: 55 Artificial intelligence and machine learning; and (q) 56 Other computer science and cyber-related content. (h) 57 The State Department of Education shall work with the Center for Cyber Education at Mississippi State University to 58 59 identify and develop the K-12 computer science curriculum and delivery options. 60 61 Beginning in the 2022-2023 school year: 62 Each local school district shall provide that all 63 middle schools in its school system offer instruction in 64 foundations of computer science; 65 Each local school district shall provide that fifty (b) percent (50%) of elementary schools in its school system offer a 66 67 minimum of one (1) hour of instruction in computer science each 68 week; 69 (C) Each charter school that serves middle or high 70 school students shall offer a course in computer science; and 71 Each charter school that serves elementary school 72 students shall offer instruction in computer science.

Beginning in the 2023-2024 school year:

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- 74 (a) Each local school district shall provide that at
- 75 least fifty percent (50%) of the high schools in its school system
- 76 offer a course in computer science;
- 77 (b) Each local school district shall provide that all
- 78 elementary schools in its school system offer a minimum of one (1)
- 79 hour of instruction in exploratory computer science each week.
- 80 (5) Beginning in the 2024-2025 school year, each local
- 81 school district shall provide that all schools in its school
- 82 system offer instruction in computer science.
- 83 (6) Each local school district is encouraged, to the extent
- 84 possible, to designate a central location within the school
- 85 district which may be used to provide the courses and instruction
- 86 required under this section to all students at all grade levels in
- 87 the district.
- SECTION 3. Section 37-13-211, Mississippi Code of 1972, is
- 89 amended as follows:
- 90 37-13-211. (1) Subject to appropriations made by the
- 91 Legislature, the State Department of Education shall provide
- 92 annual training for teachers, counselors * * *, administrators and
- 93 other certified or classified staff in order to phase in the K-12
- 94 computer science curriculum. Preference should be given to
- 95 districts who have the fewest number of teachers or staff trained
- 96 in computer science. The State Department of Education shall work
- 97 with the Center for Cyber Education at Mississippi State
- 98 University to develop and coordinate * * * the training. The

99 State Department of Education may contract with private an	99	State	Department	of	Education	may	contract	with	private	and
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- 100 nonprofit providers for * * * educator training and for student
- 101 instruction, and is encouraged to utilize available cost-free
- 102 computer training, instruction and resources. Teachers and other
- 103 certified and classified staff may receive computer science
- 104 instruction training through an online platform.
- 105 (2) The State Department of Education shall provide a report
- 106 by January 1, 2022, to the Governor, the Lieutenant Governor, the
- 107 Speaker of the House of Representatives, the Chairman of the
- 108 Senate Education Committee and the Chairman of the House Education
- 109 Committee. The report shall include a strategic plan for
- 110 statewide computer science education initiatives including, but
- 111 not limited to, the following:
- 112 (i) A summary of the current state landscape for
- 113 K-12 computer science education;
- 114 (ii) A plan for expanding computer science
- 115 education opportunities to every school in the state by the
- 116 2024-2025 school year;
- 117 (iii) A plan for the development of preservice and
- 118 in-service teachers seeking a computer science endorsement or
- 119 course specific license, in order to meet the timeline for course
- 120 requirements;
- 121 (iv) The development of a vetted list of approved
- 122 vendors in computer science education that are recognized as high

123	quality	computer	science	courses	or	instruction,	which	should
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- 124 weigh preference on cost and ease of implementation; and
- 125 (v) The identification of approved computer
- 126 science courses that may fulfill at least four (4) units of
- 127 academic credit for high school graduation. The State Department
- 128 of Education shall work with the Board of Trustees of State
- 129 Institutions of Higher Learning and the Mississippi Community
- 130 College Board to approve these courses once identified.
- 131 (* * *3) The State Department of Education shall submit a
- 132 report by December 31 of each year through 2025 to the Governor,
- 133 the Lieutenant Governor, the Speaker of the House of
- 134 Representatives, the Chairman of the Senate Education Committee
- 135 and the Chairman of the House Education Committee. The report
- 136 shall include a list of schools in each district teaching computer
- 137 science and the number of computer science teachers and certified
- 138 or classified staff who are trained in each district.
- 139 **SECTION 4.** Section 37-13-213, Mississippi Code of 1972, is
- 140 brought forward as follows:
- 141 37-13-213. The Board of Trustees of State Institutions of
- 142 Higher Learning shall work with its member institutions to
- 143 identify preservice teacher preparation programs to allow for
- 144 certification in the computer science field.
- 145 **SECTION 5.** This act shall take effect and be in force from
- 146 and after July 1, 2022.