

Frequently Asked Questions about Computer Science Education in Minnesota

1. How does Minnesota define computer science?

- a. There is no official definition of computer science at the state level. For integration in the K-12 Minnesota Academic Standards, committees are using the definition from the [K-12 Computer Science Framework](#), “Computer Science means the study of computers and algorithmic processes, including their principles, their hardware and software designs, their implementation, and their impact on society.” Computer science content should focus on teaching students how to think computationally and create new technologies, not simply use technology.

2. Does Minnesota have Academic Standards in computer science?

- a. Minnesota does not have stand-alone computer science standards. Computer science is being integrated into the K-12 Minnesota Academic Standards starting with the 2018 review. The computer science concepts and skills appear in the grade level benchmarks in each of the standards.
 - i. The 2018 K-12 Minnesota Academic Standards in Arts have integrated technology and computer science concepts and skills. The related benchmarks are identified with an asterisk (*). The standards will be fully implemented in the 2021-22 school year.
 - ii. The 2019 K-12 Minnesota Academic Standards in Science have integrated technology and informational literacy standards as well as computer science concepts and skills. The related benchmarks are noted with a double asterisk (**). The standards will be fully implemented in the 2023-24 school year.
 - iii. The 2020 K-12 Minnesota Academic Standards in English Language Arts have integrated technology and computer science concepts and skills. The related benchmarks are identified with an asterisk (*). The standards will be fully implemented in the 2024-25 school year.
- b. State and national computer science education resources being used during the revision process.
 - i. Information and Technology Educators of Minnesota (ITEM) have updated their Standards for Information Literacy and Technology
 - ii. The K–12 Computer Science Framework and the Computer Science Teachers’ Association K–12 Computer Science Standards.

3. Who can teach computer science in Minnesota?

- a. Minnesota does not have a computer science license. Computer science can be taught at the secondary level with a math or business license. The [Professional Educator Licensing and Standards Board](#) (PELSB) establishes the rules governing teacher licensure.

4. What curriculum is used for teaching computer science in Minnesota?

- a. The Minnesota Department of Education does not dictate or review curriculum. Each Local Educational Agency (LEA) makes their own decisions in choosing curriculum.

5. Can a computer science class count toward graduation requirements?

- a. Yes, according to [Minnesota Statute s, section 120B.024, subdivision 2\(e\)](#), a computer science credit may fulfill a math credit requirement if it meets the state academic standards in math. In addition, if the computer science credit is taught through Career and Technical Education, the credit may fulfill a science or arts credit requirement if it meets the state academic standards in science or arts respectively.

6. Is there a course pathway for computer science?

- a. Availability of course pathways depends on individual districts and schools. As computer science is embedded in all K-12 Minnesota Academic Standards students will have experience throughout their K-12 education. Some districts have put together pathways in Career and Technical Education programs through business or trades.

7. Is there any money available for computer science programming?

- a. Minnesota doesn't currently have any designated funding for computer science. However, districts can use their Title IV, Part A grant funds to add a new computer science class, pilot test a new computer science curriculum, or provide professional development to support teachers' pedagogical and content understandings. More information is available on the [Title IV, Part A Grant Program website](#).