

March 5, 2019

## Frequently Asked Questions (FAQ): Computer Science in High School Graduation Requirements

## Types of Credit Requirements a Computer Science Course May Fulfill

Question: What credit requirement(s) may a local board of trustees allow a computer science course to fulfill?

Answer: A computer science course that is assigned the appropriate course code and taught by an appropriately credentialed instructor may fulfill any of the following:

1. A credit requirement in mathematics
2. A credit requirement in science
3. A local elective requirement
4. A local career and technical education (or technology) requirement
5. A stand-alone computer science credit requirement.

## Authority of Local Boards

Question: What state board regulation grants local boards of trustees the authority to allow a computer science credit to fulfill a credit requirement for high school graduation?

Answer: Montana Board of Public Education standards of accreditation (ARM 10.55.905) require a school district's graduation requirements to include a minimum of 20 units of study. These minimum 20 units of study must include 13 credits set forth in regulation, including 2 units mathematics, 2 units science, and 1 unit career and technical education.

A district may meet the requirements of ARM 10.55.905 by explicitly allowing a computer science course to fulfill a required unit of math, science or career and technical education. Alternatively, a district may increase the local requirements in math, science or career and technical education and allow a computer science course to fulfill one of the required credits, or establish a stand-alone requirement that all students complete a computer science credit.

Question: Can a local board of trustees use a computer science course to meet basic education program offering requirements?

Answer: Yes. Montana Board of Public Education standards of accreditation (ARM 10.55.904) set forth the minimum units of coursework districts must offer in various subject areas in grades 9-12. These minimum offerings must include, among other subject areas:

- 3 units of mathematics
- 3 units of science
- 2 units of career and technical education
- 2 units of electives.

Boards of trustees are encouraged to consider including a computer science course as one of the minimum offerings in any of these subject areas.

## Course Code and Transcript Requirements

Question: What course code requirements apply if a computer science course fulfills a local credit requirement in another subject, such as mathematics, science, or career and technical education?

Answer: Per ARM 10.55.911, a student's high school transcript must include the course code and credits earned for each course taken. This means that if a district chooses to allow a computer science course to fulfill a mathematics, science, CTE or technology credit, the school or district must:

- Assign an appropriate course code for the subject area to which graduation credit will be applied (i.e., assign a math course code if the computer science course will be allowed to fulfill a math credit requirement).
- Denote on the student transcript that the student has met the applicable subject area requirement by completing a computer science course.


## Teacher Qualifications

Question: What are the teacher licensure requirements for a student to fulfill a credit requirement in another subject area through a computer science course? Must the teacher hold a licensure or endorsement in the subject area AND computer science?

Answer: If a district chooses to allow a computer science course to fulfill a mathematics, science, CTE or technology credit, the district must ensure the course is taught by an appropriately licensed teacher. For example, if a computer science course is assigned a mathematics course code, the teacher must hold current grade-level and subject area licensure in mathematics.

The Montana Board of Public Education recently created a high-quality pathway to certification in teaching computer science content. Specifically, ARM 10.57.421 as amended by 2018 rulemaking permits an individual to obtain an endorsement on the Class 4 license to teach the following courses if $s / h e$ holds the qualifications below:

- Computer coding: Individual must:
- Hold a Class 1 or 2 license, and
- Provide verification of successful completion of a blended learning professional development course of at least 80 hours by a provider recognized by the Office of Public Instruction and the Board of Public Education, including Learning Hub courses.
- Computer information systems: Individual may provide verification of completion of an approved technical program in a recognized training institution and hold a professional license or industry standard certificate recognized by the Office of Public Instruction and the Board of Public Education.

