

SIGNIFICANT ISSUES

For high school graduation, students must successfully complete four units of mathematics, of which one shall be the equivalent to or higher than the level of algebra two, unless the parent submits written, signed permission for the student to complete a lower level of mathematics. Students are also required to complete three units in science, two of which shall have a laboratory component. This bill would allow one unit from one section (either math or science) to be satisfied by a computer science unit granted the student demonstrates competence in the subject being substituted.

Enactment of the federal Every Student Succeeds Act (ESSA) in December 2015 authorizes districts to use federal funds for programs that meet the needs of employers and provide all students with a “well-rounded” education, which includes computer science as an eligible subject. ESSA cites “computer science” as a subject that can be supported through Title II funds, which are used to invest in teacher and school leader quality. In FY15, New Mexico received \$17 million in Title II awards. Additionally, Title IV, Part A, funding can be used to support STEM initiatives, including expansion of courses, creation or enhancement of specialty schools, and integration of after school programs.

According to the Education Commission of the States (ECS), 14 states require a student to be allowed to fulfill a math, science or foreign language credit for high school graduation by completing a computer science course. In addition, Louisiana, Massachusetts, Texas and Virginia have policies that allow for computer science courses to contribute to a specialized diploma or endorsement. ECS notes “computer science and coding skills are widely recognized as a valuable asset in the current and projected job market. The Bureau of Labor Statistics projects 37.5 percent growth from 2012 to 2022 in the computer systems design and related services industry – from 1.6 million jobs in 2012 to an estimated 2.2 jobs in 2022.”

ADMINISTRATIVE IMPLICATIONS

PED will need to adopt computer science standards or provide significant guidance to ensure appropriate rigor for recognized courses.

HED notes that dual credit opportunities with higher education institutions could be developed to offer computer science courses eligible for college credit.

RELATIONSHIP

This bill relates to HB211, which adopts next generation science standards, and HJR5, which prohibits enforcement of new state rules or regulations without sufficient funding.

OTHER SUBSTANTIVE ISSUES

According to the Computer Science Teachers Association, over 29.5 thousand students took the advanced placement exam for computer science in 2013, a 19 percent increase from 2012. The overall pass rate was 66.9 percent, a 3.6 percent increase from the previous year. New Mexico, along with 17 states and the District of Columbia had less than 100 people take the exam.