# **Legislative Analysis**



#### "STEM" DIPLOMA ENDORSEMENT

Senate Bill 344 (S-2) as passed by the Senate

Sponsor: Sen. John Proos

**House Committee: Workforce and Talent Development** 

**Senate Committee: Education** 

**Complete to 5-14-18** 

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Analysis available at http://www.legislature.mi.gov

### **SUMMARY:**

Senate Bill 344 would amend the Revised School Code to allow school districts and public school academies (PSAs, or charter schools) to indicate on a student's transcript or diploma that a student has earned a STEM (Science, Technology, Engineering, and Mathematics) endorsement if the student has fulfilled the requirements for the endorsement.

If a student has fulfilled all of the following in grades 7 to 12, the district or PSA would be able to note the endorsement on the student's transcript or diploma:

- All applicable requirements of the Michigan Merit Standard for a high school diploma under Sections 1278a and 1278b of the Code (listed below in **Background**).
- At least 6 credits in mathematics. At least 5 of these would have to be in algebra I, geometry, algebra II, trigonometry, statistics, precalculus, calculus, applied math, accounting, business math, or financial literacy, or courses that cover the same content standards as those courses. At least one credit would have to cover the content standards for precalculus or calculus.
- At least 6 credits in science. At least 4 of these would have to be in biology, chemistry, physics, anatomy, agricultural science, computer science, CTE, forensics, astronomy, Earth science, environmental science, geology, physiology, or microbiology, or courses that cover the same content standards as those courses.
- At least ½ credit featuring significant coursework involving technology activities and ½ credit featuring significant coursework involving engineering activities. These credits could be gained through separate technology and engineering coursework or in conjunction with coursework associated with the credits above.

The bill would take effect 90 days after enactment.

Proposed MCL 380.1278d

## **FISCAL IMPACT:**

Senate Bill 344 would have no fiscal impact on the state but could increase costs for local school districts or PSAs. While the bill does not mandate that local school districts and PSAs notate a pupil's transcript or diploma to indicate that the pupil has earned a STEM endorsement, certifying that a student completed the necessary requirements and creating and applying the notation to transcripts and diplomas could increase administrative costs.

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#### **BACKGROUND:**

Michigan high school students must complete the Merit Standard Curriculum, or an alternative personal curriculum (developed by faculty with the student, parents, and the school superintendent), in order to earn a high school diploma. The Merit Curriculum, described in Sections 1278a and 1278b of the Code, entails the following course of study:

- 4 credits in English language arts.
- 3 credits in science, including at least biology and either chemistry, physics, anatomy, or agricultural science, or a program providing the same content (with a fourth science credit strongly encouraged). A student may fulfill the requirement for the third science credit by completing a Michigan Department of Education (MDE)-approved computer science program or curriculum or formal career and technical education (CTE) program or curriculum.
- 4 credits in mathematics, including at least algebra I, geometry, and algebra II (or an integrated 3-credit sequence of this content), plus an additional math credit in trigonometry, statistics, precalculus, calculus, applied math, accounting, business math, a retake of algebra II, or a course in financial literacy. A student may also fulfill the algebra II requirements by completing an MDE-approved formal CTE program or curriculum that has appropriately embedded mathematics content as described in the law.
- 3 credits in social science, including at least 1 credit in United States history and geography, 1 credit in world history and geography, ½ credit in economics, and a civics course.
- 1 credit in health and physical education.
- 1 credit in visual, performing, or applied arts.
- Beginning with the class of 2016, 2 credits that are grade-appropriate in a language other than English between kindergarten and 12th grade. For students graduating high school in 2016 to 2021 only, one credit of that requirement may be met in whole or in part by completing a department-approved formal technical education program or curriculum or by completing visual or performing arts instruction that is in addition to the one credit of visual arts, performing arts, or applied arts that is also required to receive a high school diploma.

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<sup>■</sup> This analysis was prepared by nonpartisan House Fiscal Agency staff for use by House members in their deliberations, and does not constitute an official statement of legislative intent.