

HB 1189 - Senate Version.pdf

Uploaded by: April Rose

Position: FAV

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Carroll and Fredrick Counties

ASSISTANT MINORITY LEADER

Economic Matters Committee

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and Commercial Law

Property and Casualty Insurance

Unemployment Insurance

Chair

Carroll County House Delegation



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THE MARYLAND HOUSE OF DELEGATES
ANNAPOLIS, MARYLAND 21401

April 1, 2024

Support House Bill 1189

Public Schools – Mathematics Credit – College Preparatory Computer Science
or Computer Programming Course

Education, Energy and the Environment Committee

Dear Chair Feldman, Vice Chair Kagan and Members of the Committee,

Thank you for the opportunity to present HB 1189.

This bill has passed both this committee and the House several times, and it is my hope it will get a vote in the Senate this session.

The bill seeks to **enable** county boards of education to allow computer science or computer programming to satisfy the graduation requirement for one of the math credits, a significant trend that is developing as the necessity for computer education becomes vital.

Maryland needs to join this trend.

I would like to make clear that this bill would allow localities to adopt this option but would not mandate changes in curriculum.

Research shows 83 percent of parents and 64 percent of school principals believe offering computer science is more - or equally - important as any required course. Computer science is about logic, problem solving, and creativity. And it leads to jobs.

According to Code.org, there are currently more than 500,000 open computing jobs nationwide. Dice.com has 49,500 openings for computer positions across Maryland. These are high paying jobs.

Over double the average annual salary of other positions. Sixty-seven percent of all new jobs in STEM are in computing. Lifetime earnings for a general college graduate is \$1.19 million dollars. Lifetime earnings of a computer science major is \$1.67 million dollars.

Women who try computer science in high school are ten times more likely to choose this as a major. Black and Latino students are seven times more likely to take this course of study. This trend continues to grow in the United States.

Many states allow computer science or computer programming to count toward a math, science and even language graduation requirement. The trend the past several years is to move toward allowing more opportunity for students to choose computer science classes as one of their graduation requirements. It is important to take this step because it places *value* on these classes. Please visit [landscape.pdf \(code.org\)](#) to see a state-by-state breakdown on what graduation credit substitutions are allowed across the country.

These trends align with much of what we intend to do as we start to implement the Blueprint. But we cannot wait for full implementation. We need to do something now while the full plans are being developed. No child should lose this important opportunity.

We live in a technology driven society and almost every aspect of our personal and professional lives require computer skills. Exposing our children to computer science and programming will provide them with options and exciting career paths that will pave the way for opportunity and success. More than 90 percent of parents would like to have this opportunity for their children.

I have worked as a technical recruiter for almost 15 years. It goes without question that the hardest positions to fill are those in the computer science and computer programming arena. The average starting salary for a basic Help Desk Technician is between \$60,000 - \$65,000 per year. As these careers progress, the average salaries are well over six figures in the defense and commercial sector.

If this bill is passed - allowing local school boards to implement these classes - I believe we will expose all interested students to computer science and programming classes and in turn will provide a more comprehensive education that will result in greater opportunities for our students.

Thank you for your time and consideration, and I again ask for a favorable report.

Respectfully,

A handwritten signature in blue ink that reads "April Rose". The signature is written in a cursive, flowing style.

Delegate April Rose
District 5, Carroll and Frederick counties

HB 1189 LOO MSDE_State Board.pdf

Uploaded by: Laurel Cratsley

Position: UNF

TO: Senate Education, Energy, and the Environment Committee

BILL: House Bill (HB) 1189 – Public Schools – Mathematics Credit – College Preparatory Computer Science or Computer Programming Course

DATE: April 2, 2024

POSITION: Oppose

Chair Feldman and Members of the Senate Education, Energy, and the Environment Committee:

The Maryland State Board of Education (State Board) and the Maryland State Department of Education (MSDE) respectfully oppose **HB 1189**, which authorizes a student to satisfy one credit of the three-credit mathematics graduation requirement by completing an advanced placement computer science course or a college preparatory computer science or computer programming course. The student must be concurrently enrolled in or have previously completed Algebra II.

We do not oppose the bill based on the merits of the proposed subject matter but on the grounds that the legislative requirement would be duplicative of current regulatory requirements and run counter to the process that is entrusted to the State Board, MSDE, and LEAs.

To be awarded a high school diploma, Code of Maryland Regulations (COMAR) 13A.03.02.03 requires students entering 9th grade beginning in the 2021-22 school year to earn one credit of computer science, engineering, or technology education that includes the study of computers and algorithmic processes or the application of knowledge, tools, and skills to solve practical problems and extend human capabilities.

COMAR 13A.04.12.01 includes language that requires a student to enroll in a mathematics course each year in high school and allows a student to select a mathematics-related course for graduation credit, which includes AP Computer Science and a locally designed computer science course. Currently, students are not required to take Algebra II as a prerequisite. If this legislation passed, this requirement would contradict MSDE's work towards differentiation and student choice for math courses and pathways.

Under the guidance of the Charles A. Dana Center at The University of Texas at Austin, MSDE leads a statewide *Launch Years Initiative* task force. This group endeavors to redefine the role of mathematics in students' lives, emphasizing its potential as a path forward rather than a barrier to navigate. By Summer 2024, the task force is charged with collecting and using data to develop recommendations to improve alignment of mathematics content, courses, pathways and related educational policies. Ultimately, all students should have access to math pathways that:

- Are aligned with their college and/or career goals;
- Are relevant to their personal interests and lived experiences;
- Have the individualized supports that they need to succeed;
- Are equitably and authentically accessible; and
- Enable them to transition into their desired postsecondary pathway.

This work includes:

- Defining modern math pathways, including modern PreKindergarten-12 math content and instructional materials;
- Policy advocacy including recommendations and revisions if necessary;
- Centering experiences of communities historically underserved by traditional mathematics education (e.g., Black and Latinx communities and communities experiencing poverty);
- Strategic communications with interested parties; and
- Continuous improvement with a focus on equitable impact.

Requiring Algebra II as a prerequisite to computer science contradicts the outlined mission, goals, and work of Maryland's Launch Years Initiative. It would potentially limit students' access to diverse, meaningful, and modern academic pathways. In addition, it would unnecessarily complicate the initiative's immediate task of improving alignment of mathematics content, courses, pathways, and related educational policies.

In partnership with teachers, supervisors, parents, institutes of higher education, and other stakeholders, MSDE and the State Board will continue to undertake significant review of mathematics pathways and content through the Launch Years Initiative. In this process, MSDE will be certain to include our critical partners in the General Assembly.

The State Board requests that the committee consider this information on HB 1189. Please contact Dr. Akilah Alleyne, Executive Director of Government Affairs, Education Policy, and Government Relations, at Akilah.alleyne@maryland.gov or at 410-767-0504 or Zach Hands, Executive Director of the State Board, at Zachary.hands1@maryland.gov or at 443-915-6094, if you would like any additional information.