### **Public Schools - Math Credits**

Uploaded by: Delegate Rose Delegate Rose

Position: FAV

APRIL ROSE

Legislative District 5

Carroll County

Assistant Minority Leader

Ways and Means Committee

Education Subcommittee

Racing and Gaming Subcommittee

Chair

Carroll County House Delegation



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## THE MARYLAND HOUSE OF DELEGATES Annapolis, Maryland 21401

#### **Support House Bill 1280**

## Public Schools - Mathematics Credit - College Preparatory Computer Science or Computer Programming Course

#### **Education, Health and Environmental Affairs Committee**

Chair Pinsky, Vice Chair Kagan and Members of the Education, Health and Environmental Affairs Committee,

Thank you for the opportunity to present HB 1280.

This bill has passed both this committee and the House several times, but did not get a vote in the Senate.

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

According to Code.org research, there are currently more than 627,763 open computing jobs nationwide. This is an *increase of 227,763 positions* since my testimony on this issue last year. We have heard consistently there are between 15,000 to 20,000 open computing jobs in Maryland. These are high paying jobs, well over double the average annual salary of other positions.

Women who try Computer Science in high school are 10 times more likely to choose this as a major. Black and Latino students are seven times more likely. This trend continues to grow in the United States.

Last year, I testified that 40 out of 50 states allow a computer science or computer programming class to count toward a math or science graduation requirement. That number has increase to 48 out of 50 states. Maryland needs to join this list.

It is important to take this step because it places value on these classes. Included with my testimony are links that will outline the computer science trends state-by-state both as a snapshot and with detailed descriptions. These trends align with much of what we have passed in the Blueprint bill. 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 provide them with the opportunity for success. More than 90 percent of parents would like to have this opportunity for their children.

I have worked as a technical recruiter for more than 12 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 and \$65,000 per year. As these careers progress, the average salaries are well over six figures in the defense sector. Recently those salaries have been trending higher in the 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,

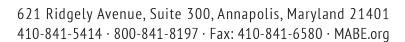
Delegate April Rose

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District 5, Carroll County

# **HB 1280.Computer Science as Math Credit - SENATE.p** Uploaded by: John Woolums

Position: UNF





BILL: House Bill 1280

TITLE: Public Schools - Mathematics Credit - College Preparatory Computer

Science or Computer Programming Course

POSITION: OPPOSE DATE: April 5, 2022

**COMMITTEE:** Education, Health, and Environmental Affairs

CONTACT: John R. Woolums, Esq.

The Maryland Association of Boards of Education (MABE) opposes House Bill 1280, which would require all local school systems to allow high school students to satisfy part of their requirement to earn credits in math for high school graduation by completing a course in computer science or computer programming.

Generally, MABE opposes efforts by the General Assembly to legislate curriculum, courses of instruction, assessments, or graduation requirements, firmly believing that this role belongs to local boards of education in conjunction with the State Board of Education. Exceptions to this rule are rare. In creating the State Board and local boards of education, the General Assembly has delegated to them the responsibility for guiding and delivering a high quality statewide system of public education through state standards and accountability measures, and locally governed and administered curriculum, teaching, and learning.

MABE recognizes and shares the General Assembly's strong support for computer science education, as evidenced by legislation that went into effect in the 2021-2022 school year. In 2018, legislation was enacted to require all public high schools to offer at least one high-quality computer science course beginning in the 2021-2022 school year. MABE supported this legislation as amended and greatly appreciates the initiative to establish and fund the new Maryland Center for Computing Education to support much needed computer science-related professional development.

Again, MABE's opposition to House Bill 1280 does not rest on an evaluation of the merits of teaching any specified subject matter, certainly not computer science, but rather on the association's opposition to statutorily mandating or modifying the course requirements for high school graduation.

For these reasons, MABE requests an unfavorable report on House Bill 1280.

# **HB1280 Howard Co BOE Testimony 040522 for EHEA - M** Uploaded by: Staff Howard County

Position: UNF





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Board of Education of Howard County
Testimony Submitted to the Maryland Senate,
Education, Health, and Environmental Affairs Committee
April 5, 2022

**HB1280: UNFAVORABLE** 

**Public Schools - Mathematics Credit - College Preparatory Computer Science or Computer Programming Course** 

The Board of Education of Howard County (the Board) opposes **HB1280 Public Schools - Mathematics Credit - College Preparatory Computer Science or Computer Programming Course** as a curriculum mandate with potential unintended consequences for students.

HB1280 would allow an Advanced Placement (AP) Computer Science course or an equivalent college preparatory course approved by a local board to count towards a mathematics credit. This is currently existing practice, as the Howard County Public School System allows AP Computer Science A (CT-475-1) to serve as a mathematics course credit in high school to satisfy one of the high school graduation requirements.

Current graduation requirements state that students must earn 4 mathematics credits while also being enrolled in a mathematics course in each year of high school. This is a practice particularly important for students seeking to enter a four-year university or college, which may not also recognize a computer science course as the equivalent of a mathematics course. University System of Maryland (USM) Schools in particular accept AP Computer Science as one of four required mathematics courses for admission. However, in accordance with the USM requirements, the AP Computer Science course should not serve as the final high school mathematics course. This could put students in a situation where they satisfy the requirements of the bill, particularly in (B) requiring the student to "enroll in the course concurrently with or after completing Algebra II" but not realize this sequence could negatively affect their college entry. Therefore, students taking AP Computer Science A (CT-475-1) in grade 12 should also enroll in another mathematics course.

As a legislative platform, the Board opposes curriculum mandates. While computer science in and of itself is an important and recognized avenue for student learning - with many related courses offered including through our Career and Technical Education programs - replacement of mathematics courses should be decided by education experts. The authority to determine curriculum should remain with the state and local boards which are best suited to develop comprehensive curricula and assessments.

For these reasons, we urge an UNFAVORABLE report of HB1280 from this Committee.