

WHAT

Comprised of two separate components — STEM Core Bridges and STEM Core College — this program advances remedial students to mathematical proficiency at an accelerated rate.

STEM Core Bridges

After their junior year, students engaged in STEM Core Bridges can earn dual credit for high school and college by enrolling in a five- to six-week intensive summer mathematics course. Accompanied by a teacher from their public school, students spend the morning in class and the afternoon learning college study skills, hearing from industry guest speakers and working to solve a problem faced by an FMA member organization. The following school year, students continue in their collegiate math studies, taking additional courses for dual credit with the ultimate aim of mastering Pre-Calculus or introductory Calculus before graduation. After their senior year, students participate in a summer internship to further hone their skills and experience.

STEM Core College

Recruited to the program during their first remedial math course (based on placement), students who enroll in this program take two math courses at a time to accelerate their progress towards proficiency in introductory Calculus. To help them on this path, students are assigned a “student navigator” at the college, who assists them with all aspects of their life in college, including referrals to any wrap-around services needed, such as tutoring, financial aid assistance and childcare. Between their first and second year in the program, students complete a paid internship that provides them the opportunity to put their skills to the test and see the relevance and importance of their coursework in industry.

WHY

Maryland has more than 20,000 open positions in cybersecurity alone, making it clear that demand far outweighs supply when it comes to candidates who have the skills needed to fill these positions.

Pre-calculus and calculus are daunting college courses that pose a barrier to many students in reaching those proficiencies, especially for students who have historically struggled in mathematics coursework. Most colleges offer an opportunity for such students to take a terminal math course (often simple function or geometry-based) to fulfill a general education requirement for the subject.

STEM Core looks at those same students as an opportunity to enhance the pipeline of students headed towards STEM careers by re-engaging them in their mathematics education. The program provides students the tools necessary to build confidence and master the complicated mathematical concepts that open doors to the skills needed to fill those positions.



WHO

These programs have been offered or will be offered in partnership with:

- ★ Anne Arundel Community College
- ★ Community College of Baltimore County
- ★ Howard Community College
- ★ Digital Harbor High School
- ★ Forest Park High School
- ★ Anne Arundel County Public School

HOW YOU CAN HELP

- ★ Provide opportunities for students to complete paid internships with your company.
- ★ Serve as a mentor to a group of students working to solve a problem faced by your company.
- ★ Join us as a speaker to describe your industry and the work your organization does.
- ★ Provide a donation to our Education and Workforce fund that will help ensure that students in the region continue to benefit from opportunities to re-engage with STEM education.



For more information about the Fort Meade Alliance Foundation, visit www.ftmeadealliancefoundation.org or call 410.850.4940.