

## Seeking Answers

Do you enjoy...

- Discovering how things work?
- Hands-on science and technology activities?
- Working with computers?
- Designing new inventions?

Then a career in  
STEM is for you!

*"The Academy programs at Blair have given me many opportunities to explore the topic of environmental science, which is one of the college majors I would like to pursue in the future. The classes and experiences I have been exposed to have definitely helped me to identify my future academic and career paths." -Jean-Paul*



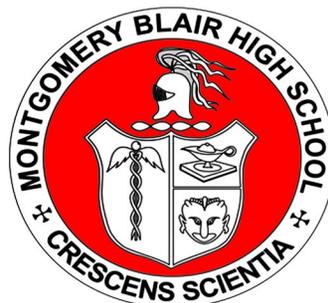
### Our Mission

The Mission of the Academies at Montgomery Blair is to enhance the high school experience with unique electives and events that allow students to explore their career interests.

### Downcounty Consortium

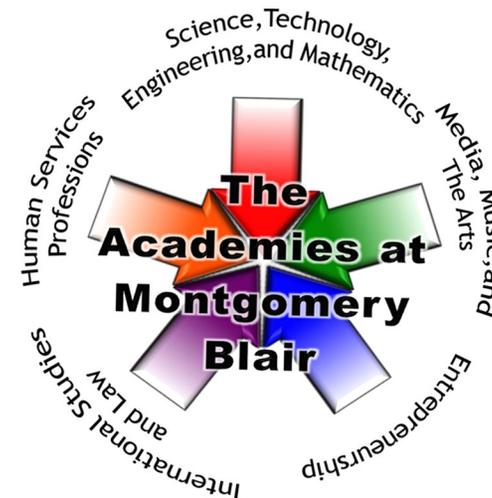
The DCC includes five high schools and their feeder middle and elementary schools—Blair, Einstein, Kennedy, Northwood, and Wheaton.

Each DCC high school offers distinctive academy programs designed to capture students' interest, incorporate rigorous academic course work, explore possible career pathways, and bring real world relevance to students' education.



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## Academy of Science, Technology, Engineering, and Mathematics



Montgomery Blair High School  
51 University Blvd East  
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Lead Teacher: John Haigh



## What is STEM?

Students in the Academy of Science, Technology, Engineering, and Mathematics will experience the connections among these disciplines as they prepare for a career in this area. The emphasis will be on hands-on problem solving, analytical thinking, data analysis, and research skills.

Career goals include, but are not limited to, database administrator, network specialist, software engineer, computer technician, surveyor, civil engineer, robotics specialist, geneticist, forensic scientist, physician, veterinarian, mathematician, and statistician. Careers in this area span a broad spectrum from the applied to the theoretical.

## Strands and Electives

The following strands are designed to guide students in their choice of electives.

- Computer Programming and Network Management
- Engineering Technology
- Skilled Trades
- Medicine
- Forensic Science
- Environmental Science

The following classes are examples of electives offered by MBHS that introduce students to skills and concepts they will need for an STEM career.

- Microcomputer Technologies
- Website Design
- Quantum Physics
- Anatomy and Physiology
- AP Chemistry
- Forensics
- AP Statistics

## Careers and Internships

A key aspect of the Academy is to provide students with opportunities to experience their chosen pathway. Past STEM internships include:

- Tutoring students in math and science
- Independent research on breast cancer at Johns Hopkins
- Designing computer programs and games
- Participating in college courses at Salisbury University
- Working with science researchers at Walter Reed and other local laboratories
- Attending HHMI lectures and other local medical conferences

## Capstone Projects

The Capstone Project is an individual piece of work designed to give each student a chance to explore an area of interest connected to their academy and personal education and career goals. Capstone Projects may take a variety of forms, but each one will have three similar components which include a *reflective essay*, a *journal*, and a *presentation*.

