## **Montgomery Blair High School**

# Science, Mathematics, and Computer Science Magnet Program

for Grades 9 through 12



51 University Boulevard, East Silver Spring, MD 20910 301-649-8240

Applications available at www.montgomeryschoolsmd.org/curriculum/specialprograms





# The Program

The Science, Mathematics, Computer Science magnet program opened in September 1985 as a special program designed to offer accelerated, interdisciplinary courses in science, mathematics, and computer science for highly able students. The program has since grown to a full program that provides a unique sequence of courses and enrichment opportunities for students in Grades 9 through 12. A new facility opened in August 1998 providing state-of-the-art equipment and other resources to challenge students to study, learn, and experiment in all



disciplines. The result is an exceptional educational environment unlike any other public high school.

The program is located in Montgomery Blair High School to help promote high-quality, integrated education and to enhance learning opportunities for highly able students from across the county. Its location in a comprehensive high school and the eight-period day have the further advantage of offering students a full range of liberal arts courses. In addition, magnet students have been active in student government and all forms of arts, athletics, and extracurricular activities.

Those students selected for this program can build an extraordinary foundation in all subject areas, better understand their interrelationships, and participate in unique research opportunities. Each day students take four courses with the magnet staff within the magnet facilities. Other courses required for the Maryland high school diploma and college admission, such as English, foreign languages, social studies, and electives, are taken with students of comparable academic and intellectual ability.

# The Faculty

Magnet faculty members were selected based on their academic achievement in at least one of the magnet's disciplines, superior teaching abilities, and their interest in working with highly able students. All staff members have advanced degrees and have received numerous awards and honors.

# The Setting

Montgomery Blair High School has played a prominent role in Montgomery County since 1935. Each year its graduates receive local and national recognition. Awards to students have come from such activities as the Annual High School Mathematics Examination, Montgomery County



Science Fair Grand Award Winners, first-place winners in the International Science and Engineering Fair, Super-Quest finalist teams, finalists in the Intel Talent Search, national winners in the NASA Space Science Student Involvement Project, American Computer Science League National Champion Teams, Grand Winner of the Physics Olympics for the Baltimore/Washington D.C., metropolitan area, and first-place winners in the National Junior Science and Humanities Symposium.

With the magnet program, Montgomery Blair offers students an unparalleled breadth of courses and facilities. These include traditional comprehensive high school offerings, Advanced Placement and Honors courses, the magnet sequence, and unique opportunities with partners and mentors from research and business.

The Montgomery Blair campus in Silver Spring is located at the intersection of Colesville Road and University Boulevard East. The school is approximately two miles north of the Silver Spring Metro station on the University of Maryland shuttle line and is served by the Montgomery County Ride-On buses as well as MCPS school buses.

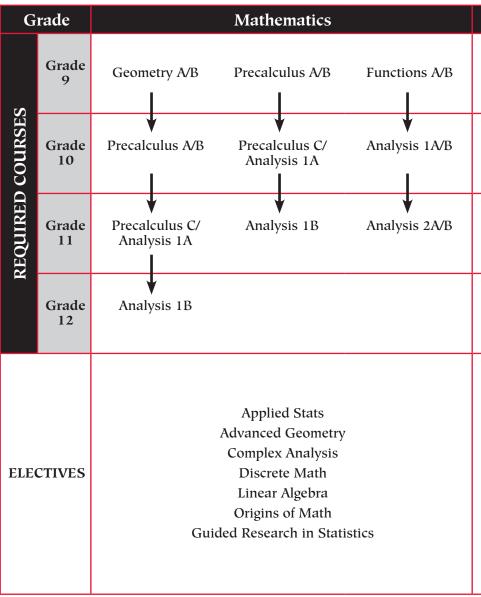
### The Students

Students selected for the magnet program have a unique opportunity to interact with intellectual peers who share their interest in all disciplines, especially mathematics, science, and computer science. The curriculum is designed so that each student is able to build a solid foundation in Grades 9 and 10. During the junior and senior



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# MCPS Science, Mathematics and Comp



# puter Science Magnet Course Sequence

Science	Interdisciplinary	Computer Science
Advanced Science 1: Physics Advanced Science 2: Chemistry	Research & Experimentation: Techniques for Problem Solving A & B	Fundamentals of Computer Science A & B
Advanced Science 3: Earth Space Systems Advanced Science 4: Biology A & B	Principles of Engineering A	Algorithms and Data Structures A & B
	Principles of Engineering B	
Analytical Chemistry Astronomy Biological Chemistry Cellular Physiology Genetics Marine Biology Optics Physical Chemistry Plate Tectonics/ Oceanography Thermodynamics Quantum Physics	Robotics Materials Science Origins of Science	AI/LISP Analysis of Algorithms Computational Methods Graphics Modeling & Simulation Software Design 3-D Graphics

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years, students have opportunities to go beyond traditional high school offerings, with more than 25 special courses and additional guided research opportunities available. Also, they are expected to do a senior project, which culminates their four-year experience.

Student selection is based on the following criteria:

- Demonstrated interest in mathematics, science, and computer science
- A high achievement record in mathematics and science
- Recommendations from teachers and others familiar with the student's work
- Demonstrated ability to pursue inquiry and research and think critically
- High scores on aptitude, achievement, and critical thinking tests

### General Information

Students who are accepted into the magnet transfer into the program at the end of Grade 8. They would be expected to complete their high school education at Blair.

#### **Transfers**

Students admitted to the magnet program who live outside the Montgomery Blair High School attendance area must complete MCPS Form 335-45: *Request for Student Transfer*.



#### Schedule

Magnet program students attend classes from 7:25 a.m. to 3:00 p.m. each day. All extracurricular activities are open to magnet students.

### Transportation

School bus transportation to and from Blair is provided from central locations throughout Montgomery County. These locations are selected to serve the maximum number of students. Transportation between home and the central pick-up point is the student's responsibility.

### To Learn More

An informational meeting about the magnet program will be held in the fall. The location and date can be obtained by contacting the magnet office at 301-649-8240.

An informational packet and application materials are available from counselors in MCPS middle schools, or on request from

Montgomery Blair High School Magnet Program Coordinator 51 University Boulevard East Silver Spring, MD 20910 Phone: 301-649-8240

Applications should be sent to the Montgomery Blair High School magnet coordinator by a designated deadline in November.

This document is available in an alternate format, upon request, under the Americans with Disabilities Act, by contacting the Public Information Office, at 850 Hungerford Drive, Room 112, Rockville, MD 20850, or by phone at 301-279-3391 or via the Maryland Relay at 1-800-735-2258.

Individuals who need sign language interpretation or cued speech transliteration in communicating with Montgomery County Public Schools (MCPS) may contact Interpreting Services in the Deaf and Hard of Hearing Program at 301-517-5539.

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