Magnet Programs

An overview for prospective students

What is a Magnet?

- A unique program for focused interests
- Nationally recognized
- Attracts students from all areas of Harford County
  - Application process

Goal: Prepare students for secondary- and post-secondary successes in academics and careers related to their programs of study.

Current Offerings

1. **G**lobal **S**tudies **I**nternational **B**accalaureate, Edgewood

2. **I**nformation **T**echnology **O**racle **A**cademy, Havre de Grace

3. **J**unior **R**eserve **O**fficers' **T**raining **C**orps, Joppatowne

4. **N**atural **R**esources and **A**gricultural **S**ciences, North Harford

5. **P**athways in **T**echnology **E**arly **C**ollege **H**igh School, Joppatowne

6. **S**cience and **M**athematics **A**cademy, Aberdeen

7. **T**eacher **A**cademy of **M**aryland & TAM+, multiple sites

8. **Trades** and Industry programs, Harford Tech

What do Magnet students learn?

Durable Skills:

- Critical and Innovative Thinking Systems

- Inquiry

- Problem-Solving

- Time Management

- Research

- Communication

Through advanced and collegiate coursework in fields related to

- Engineering

- Medicine

- Technical

- Computer Science

- Animal Science

- Trades

and other areas.

Global **S**tudies **I**nternational **B**accalaureate

Students develop a global perspective and are empowered to affect change in their communities in the areas of

- STEM (Science, Technology, Engineering, and Math)

- Humanities

- Arts

- Philosophy

*Successful completion of Algebra I is required.
Geometry is recommended and may be taken in the summer prior to 9th grade.*

Information Technology Oracle Academy

- Computer Programming and Database Design
- Java and PL/SQL languages
- 16 Dual Enrollment courses with Harford Community College
- Internship and Info Tech Apprenticeship opportunities

Successful completion of Algebra I prior to 9th grade is recommended.
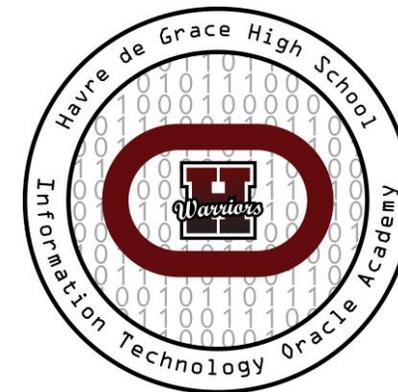
Junior Reserve Officers' Training Corps

1. Act with integrity and personal accountability as you lead others to succeed in a diverse and global workforce
2. Engage in civic and social concerns in the community, government, and society
3. Graduate prepared to succeed in post-secondary options and career pathways
4. Make decisions that promote positive social, emotional, and physical health
5. Value the role of the military and other service organizations

Natural Resources & Agricultural Sciences

Successful completion of Algebra I prior to 9th grade is recommended.

4 Dynamic Strands

Large Animal Sciences
- Animal Management
- Comparative Anatomy & Physiology

Small Animal Sciences
- Animal Management / Vet Tech
- Comparative Anatomy & Physiology

Plant Sciences
- Plant Propagation and Production
- Edible, Environmental, and Ornamental Plants

Natural Resources Science
- Wildlife Management
- Wetlands and Aquatics

Pathways in Technology Early College High School

- 2 Dynamic Strands
  - Computer Information Systems
  - Cybersecurity
- Graduate high school with 60 hours towards an Associate Degree
- 3 Industry Certifications
  - Network Plus
  - Security Plus
  - A Plus
- 2 Community Partners/Mentors
  - CECOM (APG)
  - Harford Community College

Science and Mathematics Academy

Successful completion of Algebra I and Geometry is required. Geometry may be taken in the summer prior to 9th grade.
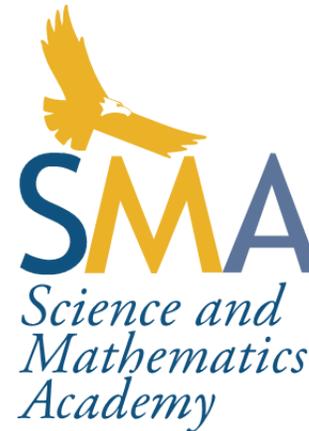
- Authentic hands-on research
  - Science, Research, and Technology (SRT)
- Design experiments and analyze data to develop solutions
- Preparing for success in STEM
  - Engineering (all branches)
  - Mathematics
  - Science (Biology, Chemistry, Physics)
  - Computer Science

Teacher Academy of Maryland and TAM+

- For aspiring teachers or related fields working with children
- TAM courses are weighted.
- Guaranteed internships for TAM and TAM+ students
- Option to earn college credit in the TAM+ program
  - Associate Degree of Arts in Teaching
  - All associated fees are paid for by HCPS

Program is offered at multiple sites

Trades at Harford Technical High School

1. Academy of Health Professions
2. Automotive Diagnostic System Repair
3. Automotive Refinishing and Repair
4. Carpentry
5. Computer-Aided Drafting and Design
6. Computer-Aided Machining
7. Cosmetology
8. Electrical
9. Food Preparation and Management
10. Heating Ventilation and Air Conditioning
11. Horticulture – Floral Design and Landscaping
12. IT Networking
13. Printing and Graphics Communications
14. Sports Medicine and Exercise Science
15. Welding
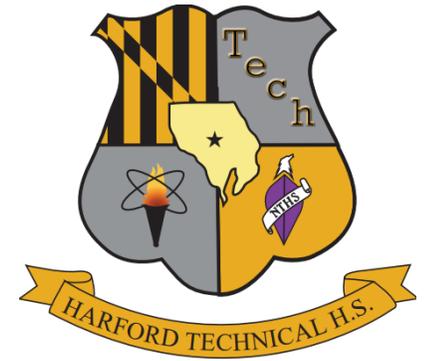
Applying to a Magnet Program

APPLY ONLINE FOR UP TO 3 PROGRAMS

- Choose only 1 program at Harford Tech
- Applications open Friday, October 13 and close Friday, December 1 at 12:00 am.

WHAT IS CONSIDERED?

- Academic achievement in middle school
- Extracurricular Activities
- Essay response/writing sample
- Teacher endorsements

Visit us

www.hcps.org/magnetprograms/

For more information,

- ✓ Schedule time to meet with your School Counselor.

- ✓ Meet the Program Specialists at an upcoming middle school visit.

- ✓ Attend a Magnet Information Night or Open House events.

    www.hcps.org/magnetprograms for dates, times, and locations

Follow us @HCPS_CTE
for information and reminders

HARFORD COUNTY
PUBLIC SCHOOLS