



## Results —

MSTC Students have distinguished themselves in many ways. Last year's graduating class was offered **over \$10 million in college scholarships**. They had an average (weighted) GPA of 4.71, an average ACT score of 34, and had completed an average of 13 AP courses.

- \* Last year 25 MSTC students were named **National Merit finalists**.
- \* Last year 15 MSTC seniors had **perfect** scores on their ACT exam.
- \* MSTC students have presented their research at **regional and national conferences** and several have published their research in professional journals.
- \* MSTC students compete in science fairs with an MSTC senior recognized with the Young Scientist Award at the **International Science and Engineering Fair**.
- \* MSTC students are **accepted into the most prestigious schools in the country**, including MIT, Yale, Washington University in St. Louis, Stanford, and Princeton.

## Admissions —

Any eighth or ninth grade student who is a **resident of Fayette County** and who will complete **Algebra I** by the end of the eighth grade is welcome to apply by completing the application that can be found online at

[www.fcps.net/gifted](http://www.fcps.net/gifted)

The application window will be announced by the district.

Students will be assessed regarding their aptitude in math and science, with all qualified applicants **taking an IOWA math, IOWA science, and an MSTC Admissions test**. To be eligible, students will have to score at or above the 96th percentile on at least one of the IOWA exams.

Invitations will be issued after the end of the application window.

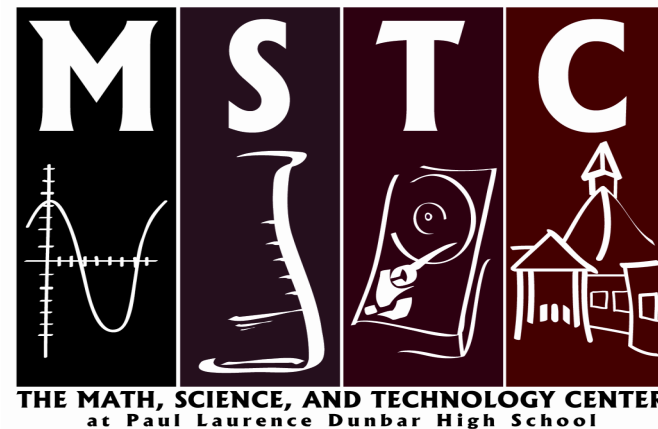
To learn more about the MSTC program, visit our website at [www.pldmstc.weebly.com](http://www.pldmstc.weebly.com)

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# MSTC

The Math, Science and Technology Center offers a **four-year program** designed to develop students who are **internationally competitive** in STEM (Science, Technology, Engineering, and Math) disciplines. We expect our students to demonstrate their success with a significant **individual research project**, with Advanced Placement and other standardized test scores, with the college majors they select, and with the colleges to which they are accepted.

Students, selected from eighth grade students around the district, enter the MSTC program at the beginning of the ninth grade. These students then spend their four high school years attending the MSTC program within Paul Laurence Dunbar High School. In most cases, current ninth graders can also apply to join the MSTC program at the beginning of their sophomore year.

Success in MSTC requires **ability, interest, and maturity**. The MSTC school day is one hour longer, and the **academic workload is very time consuming**. MSTC students are, in fact, **working at the college level** during all four of their high school years. This includes the privilege of having academic and personal freedoms usually reserved for college students.

## MSTC Class Sequence—

### 9th grade

- \* MSTC Chemistry I
- \* MSTC Computer Science (AP Principles or A)
- \* Appropriate MSTC Math course

### 10th grade

- \*MSTC AP Physics 1
- \*MSTC Biology
- \*AP Statistics
- \*Appropriate MSTC Math course

### 11th grade

- \*MSTC Earth/Space Science
- \*MSTC Junior Research
- \*Appropriate MSTC Math course
- \*MSTC advanced elective

### 12th grade

- \*MSTC Senior Seminar
- \*MSTC Senior Research
- \*Appropriate MSTC Math course
- \*MSTC advanced elective
- \*MSTC advanced elective

## MSTC Electives—

- AP Chemistry and Organic Chemistry
- AP Biology, Biology 3, Human Anatomy
- AP Physics 2 and AP Physics C
- Java Programming 2 and Project-Based Programming
- Multivariable Calculus / Diff Equations
- Linear Algebra / Discrete Math
- Special Topics in Engineering



## Staff

The MSTC staff are an extraordinarily qualified and capable group of educators who are dedicated to helping their students succeed. In addition, MSTC students are supported by individuals from the local business and education communities who serve as guest speakers and as individual mentors for the MSTC research projects.



## Graduation Requirements—

To be awarded an MSTC diploma, students must complete all graduation requirements of the Fayette County Public Schools as well as:

- \* A **360 hour** research project
- \* At least **one MSTC mathematics course** each year which must include MSTC AP Calculus BC
- \* **Fifteen** full-year MSTC courses during high school
- \* **Three years** of the same foreign language