



**Principal Crystal Bonds, HSMSE @ CCNY**

About:

The High School of Math, Science & Engineering (HSMSE) is a selective public college preparatory academy that provides students the opportunity to enroll in advanced STEM courses, designed to enhance intellect and develop critical thinking, problem solving, research abilities, and presentation skills.

Instructionally supported and enriched by The City College of New York (CCNY), students complete their high school requirements in the third year of study and have the opportunity to earn a minimum of one year of college credit at CCNY.

Key Facts and Statistics:

- HSMSE has approximately 480 students and 30 faculty. .
- HSMSE enrolls a diverse student body and promotes a collaborative environment that yields success and opportunity for all students, regardless of race or economic circumstance.
- Virtually all of HSMSE students graduate to attend college.

Best Practices: Excellence Gap:

HSMSE has instituted a number of policies, aimed at supporting low-income, high-achieving students. Closing the Excellence Gap includes initiatives such as

- STEM Middle School Initiative
  - A pipeline to prepare neighborhood students for the Specialized High School Admissions Test (SHSAT) for admissions into one of the eight specialized high schools. Middle school students from the neighborhood come to HSMSE on Thursdays for STEM instruction and on Saturdays for English and math instruction, to prepare for the test.
- Academic Intervention Services (AIS)
  - Saturday , Lunch Period, and AM/PM School
    - Regents and Advanced Placement Preparation
    - Study Hall
    - Faculty and Student-to-Student Peer Tutoring

- Credit Recovery Program
  - Instructors provide students who failed classes in the previous term work to complete under the supervision of a Credit Recovery coordinator. All credit recovery students receive additional support from guidance interns and peer tutors.
- Freshman Academy
  - High School students are some of the busiest people in the world. Preparing our students for success starts on day one in Freshman Academy. Instructors acclimate students to high school, foster an inclusive and accepting community, and teach time management, public speaking, and presentation skills.

Best Practices: School-to-Workforce Pipeline:

HSMSE is committed to ensuring that students graduate with marketable skills that lead to high-level careers in STEM fields. HSMSE has established several programs to better connect curriculum and students with the workforce, including:

- Inform, Expose, and Prepare (IEP):
  - Lunch and Learn: A Professional View
    - The purpose of this model is to introduce high school students to the corporate work force. Industry partners come into the school for 90 minutes, four or five days per week with a different speaker from various departments of the organization. This program serves as a prerequisite for a summer apprenticeship with the partnering company.
  - Advisory
    - Students are broken into small groups of 10-15 to meet with teachers and administrators to discuss college and career readiness topics. For the junior class, for Advisory we partner with Highbridge Capital to assist with various topics from resume writing and honing your elevator speech to personal branding and cyber profile. For the senior year, we partner with Morgan Stanley to give workshops on being a good orator to interviewing skills. Both opportunities result in possible internships with the companies.
  - Career and Technical Education (CTE)
    - The purpose of this program is to enhance student experiences from academia to the workforce with challenging curriculum and partnerships. Much of our coursework expands the programs from Project Lead The Way with real world applications and project-based, inquiry learning.

To learn more about HSMSE's work to support the CLASS Coalition's mission and objectives, please contact Crystal Bonds at [crystal.bonds@classcoalition.org](mailto:crystal.bonds@classcoalition.org).

