# THE SPECIALIZED HIGH SCHOOLS

#### THE BRONX HIGH SCHOOL OF SCIENCE

75 Bronx Science Boulevard, Bronx, New York 10468
Phone: (718) 817-7700 ■ Website: www.bxscience.edu
Email: golanc@bxscience.edu

Overview: The Bronx High School of Science educates an academically gifted community of learners through a rigorous science, technology, engineering, and mathematics (STEM) curriculum. All academic disciplines are taught through the lens of inquiry to emphasize critical thinking and problem solving. The school cultivates a diverse community of lifelong learners who discover their passions through a collaborative and supportive network of students, educators, and alumni. Utilizing a balance of theoretical and applied learning, students explore complex problems and have access to a rich offering of resources to develop solutions. Drawing upon a long tradition of academic success, The Bronx High School of Science prepares students to flourish in the best colleges and universities. The school creates the leaders and visionaries of the future. Included among the school's alumni are eight Nobel Prize winners and six Pulitzer Prize winners.

Academic program: The Bronx High School of Science offers 30 Advanced Placement (AP) courses and many post-AP courses (second-year college courses). The school offers six foreign languages, numerous electives in biology, chemistry, physics, mathematics, technology, the humanities, music and a three-year independent research course in STEM or social science. Students may also select sequences in computer science and engineering that emphasize hands-on applications of scientific principles. The school's website provides full course descriptions.

**Extracurricular activities:** Extracurricular activities include over 70 after-school clubs, 43 athletic teams, an internationally acclaimed speech and debate team, Model UN, mock trial team, two robotics teams, two theatrical productions, S!NG, Science Olympiad, Junior Achievement, programming club, makerspace, two hackathons, a newspaper and yearbook, scholarly journals and more. Check our website for details.

**2018 Admissions:** 19,715 students listed Bronx Science as a choice on the SHSAT, and 912 offers were made.

## THE BROOKLYN LATIN SCHOOL

223 Graham Avenue, Brooklyn, New York 11206
Phone: (718) 366-0154 ■ Website: www.brooklynlatin.org
Email: parents@brooklynlatin.org

**Overview:** Modeled after the prestigious Boston Latin school and founded in 2006, The Brooklyn Latin School (TBLS) provides a liberal arts curriculum, with an emphasis on the

Classics and Latin language instruction. Early instruction emphasizes the acquisition of core knowledge of the key academic disciplines that students use as a foundation for deeper exploration in the upper grades. Widely regarded around the world as the most rigorous and comprehensive course of study at the high school level, the International Baccalaureate (IB) Programme is integral to the TBLS curriculum. In all classes, students experience a strong and consistent emphasis on structured writing and public speaking, as well as numerous opportunities for analytical thinking, which prepares them for the challenges of college work.

Academic program: All students are required to complete four years of study in Latin, history, mathematics, English, and science, at least two years of a world language, and one year of art history. Many of our classes feature public speaking exercises such as Declamation and Socratic Seminars, as well as oral presentations of scientific labs and mathematical problem sets. In addition, many of our classes feature writing exercises such as science lab reports, Spanish portfolios and essays, math modeling papers, and Latin sight translations. The IB Programme's emphasis on student-led inquiry, global perspectives, international mindedness, and personal integrity conform perfectly with the ideals on which the school was founded. In addition to rigorous class work, IB emphasizes independent thinking and community engagement. In order to earn the IB Diploma, students are expected to complete an independent research project that culminates in a 4,000-word essay paper on a subject of choice, a task which correlates closely to college-level research writing. They are required to take a two year epistemology course called Theory of Knowledge (TOK) that challenges students to consider the ways knowledge is constructed, and which culminates in a final research paper and presentation. In addition, students are required to engage in activities involving creativity, service, and reflection over an 18-month period. Creativity, action, and service (CAS) may include volunteering or engaging meaningfully with the TBLS community and the larger community. These requirements of the IB Diploma help our students become well-rounded citizens of the world.

Extracurricular activities: To provide enrichment for students outside of the classroom, and to facilitate the completion of their CAS requirements, TBLS currently supports over 40 extracurricular activities, including athletic teams such as coed cross country, soccer, boys and girls basketball, boys wrestling, and girls volleyball clubs; fine and performing arts offerings such as studio art, photography, literary magazine, dance, and a cappella; and various other groups such as the school newspaper, STOKED, Math Club, Science Olympiad, Model United Nations, Law Club, and many more. TBLS also has student organizations such as Asian Student Association,

Black Student Association, Feminist Student Union, Muslim Student Association, National Honors Society, and GSA.

**2018 Admissions:** 17,111 students listed The Brooklyn Latin School as a choice on the SHSAT, and 582 offers were made.

#### **BROOKLYN TECHNICAL HIGH SCHOOL**

**29 Fort Greene Place, Brooklyn, New York 11217 Phone:** (718) 804-6400 **Website:** www.bths.edu

Email: info@bths.edu

Overview: With approximately 6,000 students, Brooklyn Technical High School (Brooklyn Tech) is the largest public high school devoted to science, technology, engineering, and mathematics (STEM). Many of Brooklyn Tech's facilities have been reborn for the 21st century. Our school has computer rooms configured to teach digital design and are equipped with 3D printers. Brooklyn Tech has a full-scale moot court and a forensics science laboratory. There are state-of-the-art labs in manufacturing and robotics, digital media, DNA and genetics, environmental science inclusive of a greenhouse, building construction in which a two-story building is created, architecture, and aeronautics (with an industry standard flight simulator). The school is a national model for excellence and has a stimulating environment that fosters transformational education and personal growth. Through input from its STEM partners, our labs and classrooms are on par with university and industry standards. The very active Brooklyn Tech Alumni Foundation enriches the culture of the school, supports student and faculty initiatives and is an incubator for new school programs. Graduates go on to the finest colleges and universities. They are found in every facet of society. Graduates invented the digital camera, contributed to the development of the internet, and helped put humans on the moon. They are innovators and entrepreneurs. Brooklyn Tech graduates have won Nobel prizes and occupy prominent positions in industries, engineering firms, corporations, government, academia, and research institutions.

Academic program: In the ninth grade, all students take Design and Drawing for Production, which is a foundational course through Project Lead the Way. This class immerses students in the design process, from brainstorming to prototyping through 3D printing. Students use industry standard 3D modeling software (Autodesk Inventor) to complete both individual and team-oriented projects. In addition, all ninth graders take advisory to assist them in their transition to Brooklyn Tech. In the 10th grade, all students take AP Principles of Computer Science. For the 11th and 12th grades, Brooklyn Tech students choose one of the following major areas of concentration: Aerospace, Architecture, Biological Sciences, Chemistry, Civil Engineering, College Prep, Finance, Electrical Engineering, Environmental Science, Gateway to Medicine, Industrial Design,

Law & Society, Mathematics, Mechatronics & Robotics, Media & Digital Animation, Pharmacy (doctoral pipeline program in partnership with Long Island University), Physics, Social Science Research, or Software Engineering. In addition, the school offers unique electives in performance-based instrumental and choral music. There are post-AP classes in the sciences and mathematics. Student research projects are supported through the Weston Research Scholars Program.

Extracurricular activities: Brooklyn Tech's unparalleled learning environment has over 160 clubs and activities that appeal to diverse student interests, talents, and culture. The school has one of the most extensive PSAL programs including 43 athletic teams. By the end of January 2018, Tech already earned three city championships in Girls' Tennis, Boys' Fencing, and Girls' Cross-Country. Each year the fall play and Spring musical are student activity highlights. Partners in industry and higher education help sustain the level of excellence through educational enrichment, internships, mentoring and more.

**2018 Admissions:** 24,163 students listed Brooklyn Tech as a choice on the SHSAT, and 1,904 offers were made.

# HIGH SCHOOL FOR MATHEMATICS, SCIENCE AND ENGINEERING AT THE CITY COLLEGE OF NEW YORK

**240 Convent Avenue, New York, New York 10031 Phone:** (212) 281-6490 ■ **Website:** www.hsmse.org

Email: info@hsmse.org

Overview: Founded in September 2002, The High School for Mathematics, Science and Engineering (HSMSE) at The City College of New York (CCNY) provides a unique and unparalleled collaborative educational experience. The school's mission is to encourage students to develop the habits of inquiry, written and verbal expression, and critical thinking. HSMSE enrolls approximately 500 students, drawn from all five boroughs, making it one of the most ethnically diverse schools in New York City. The academically rigorous learning environment focuses on mathematics, science, and engineering, while emphasizing civic responsibility and the value of acquiring knowledge for its own intrinsic reward. HSMSE faculty work together regularly to plan lessons, develop curricula, and share best practices. Their deep professional and personal experiences enrich the learning community; many faculty members have earned doctorates, and

HSMSE staff conduct individual and group counseling sessions regularly, and coordinate the Big Sib / Little Sib Program that connect upperclassmen to serve as peer mentors to underclassmen. Through a partnership with The New York Foundling, HSMSE has a Health and Wellness Center with a

all have advanced degrees. Many have distinguished themselves in

business, engineering, and other fields prior to becoming teachers.

full-time mental health clinician. HSMSE sponsors workshops that have an overall theme and industry partners, who provide speakers from different departments to offer a comprehensive perspective of a particular job or company. Students who participate can apply for summer research, apprenticeship, and/ or employment opportunities in the partnering company.

Academic program: HSMSE faculty plan lessons that include student discussion and cooperative learning to develop and improve problem-solving skills. All students take four years of math and science courses. Core classes meet every other day for 90 minutes, allowing time to engage in hands-on activities and in-depth discussions. Students attend a 45-minute elective enrichment course daily; course options include: gastronomy, astronomy, Microsoft Office User Certification, art, poetry writing, jazz band, and classical guitar. There are three major concentrations that students select from in the spring of their sophomore year: mathematics, Mount Sinai Medical Biomedical Research Program, or engineering. HSMSE has the largest German language program in New York State. College credit courses are offered in multiple ways: Advanced Placement courses are offered to all, and City University of New York (CUNY) courses are offered to eligible students through the CCNY partnership and the CUNY College Now program. At HSMSE, we strive to educate the whole child; therefore, in addition to stellar academic support services, HSMSE offers a Health and Wellness Center with a full-time mental health clinician to meet the socio-emotional needs of our students.

Extracurricular activities: CCNY's Baskerville Hall faces the college quad, giving students green space to eat lunch, socialize, and relax on sunny days. Students may participate in a wide variety of extracurricular activities and PSAL sports after school, including Junior Statesmen of America, EatNYC, Euro-Challenge, Fed-Challenge, Science Olympiad, Robotics Club, and the Key Club International. Additionally, HSMSE offers pingpong, volleyball, dance, cheerleading, and Strategy Games clubs. HSMSE students compete in national competitions, sponsored by the Goethe Institute and American Association of Teachers of German, for study abroad opportunities to Germany. Every year, at least one HSMSE student competes successfully enough to earn two weeks free travel to Germany. During the school year, HSMSE sponsors trips to colleges such as Boston College, Massachusetts Institute of Technology, Princeton, Brown, and University of Michigan.

2018 Admissions: 19.856 students listed HSMSE at CCNY as a choice on the SHSAT, and 149 offers were made.

# HIGH SCHOOL OF AMERICAN STUDIES AT LEHMAN COLLEGE

2925 Goulden Avenue, Bronx, New York 10468

**Phone:** (718) 329-2144 **Website:** www.hsas-lehman.org

Email: atrebofiore@schools.nyc.gov

Overview: The High School of American Studies at Lehman College (HSAS) emphasizes the study of American History and offers students a well-rounded academic program that aims to prepare students for admission to highly competitive colleges and for a range of careers in politics, law, journalism, business, science, mathematics, and the arts. In all endeavors, HSAS seeks to encourage in students a love for learning and an inquisitive spirit.

Academic program: All students engage in a three-year chronological study of American History. Our aim is to make history come alive through the use of primary source documents, films, biographies, literature, and creative teaching techniques. Supported by the Gilder-Lehrman Institute, students gain firsthand knowledge of the key events in American history through trips to sites and cities of historic importance and through participation in special seminars with guest speakers. We also offer honors-level, Advanced Placement, and elective courses in mathematics, science, constitutional and criminal law, literature, film, foreign languages, history, and the arts. A special component of our program focuses on the development of college-level research skills and methodologies, and students are therefore supported by school and college faculty in the process of pursuing individualized research projects. Through our collaboration with Lehman College, students have access to its campus library and athletic facilities and take credit-bearing college classes and seminars in their junior and senior years.

Extracurricular activities: After school, students may participate in a wide variety of clubs, join one of the school's many athletic teams, and take part in competitive activities, such as moot court, mock trial, debate, and Model UN.

**2018 Admissions:** 17,238 students listed HSAS at Lehman College as a choice on the SHSAT, and 141 offers were made.

# QUEENS HIGH SCHOOL FOR THE SCIENCES AT YORK COLLEGE

94-50 159th Street, Jamaica, New York 11433 **Phone:** (718) 657-3181 **Website:** www.ghss.org

Email: BWittstruck@schools.nyc.gov

Overview: Queens High School for the Sciences at York College is dedicated to preparing students for college and career by providing them with a rigorous curriculum that emphasizes the sciences and mathematics. The school philosophy is to educate the "whole child." In addition to the emphasis on academics,

there is a strong focus on the liberal arts and on the development of students' interpersonal, intrapersonal, collaborative, and communication skills. Ultimately, we believe that through academic preparation and emphasis on the soft skills, students will become lifelong learners and independent thinkers and make tremendous contributions to our society.

Academic program: Course offerings vary from year to year. All courses are offered at an advanced or honors level. There is an extensive course offering program consisting of Advanced Placement opportunities in all the disciplines such as Biology, Calculus AB, Calculus BC, Chemistry, Chinese, English Language and Composition, Environmental Science, Physics, Spanish, U.S. History, Physics C and World History. The school offers a variety of elective courses in all the subject areas, as well as art, music, and language. Additionally, students have an opportunity to participate in science and math research courses in which they are mentored by college professors. Opportunities to enroll in City University of New York (CUNY) College Now courses, such as Biology, Sociology, Health Services, Nutrition and Health, Pre-Calculus, and Psychology are also available. Within this nurturing environment, students are further supported by their teachers, counselors, and peers.

Extracurricular activities: Since the school is located on the campus of York College, students enjoy state-of-the-art facilities such as the college's library, gymnasium, pool, theater, and cafeteria/food court throughout their high school career. A variety of clubs (determined by student suggestion and staff capacity) are available to all students, including debate, Amnesty International, No Place for Hate, Veritas (literary magazine), Key Club, robotics, basketball, photography, and many others. Students have opportunities to participate in internships, community service, science, mathematics, and art competitions. Boys and Girls Swimming, Girls Bowling, and Coed Tennis and Handball comprise the school's athletic teams.

**2018 Admissions:** 16,823 students listed Queens High School for the Sciences at York College as a choice on the SHSAT, and 151 offers were made.

#### STATEN ISLAND TECHNICAL HIGH SCHOOL

**485 Clawson Street, Staten Island, New York 10306 Phone:** (718) 667-3222 ■ **Website:** www.siths.org **Email:** BMalenfant@schools.nyc.gov

**Overview:** Staten Island Technical High School's college preparatory curriculum provides a robust liberal arts curriculum that includes courses in science, technology, engineering, arts, and mathematics (STEAM), and a cutting edge Career and

Technical Education (CTE) program. All students participate in the highly innovative 1:1 - BYOD Digital Education Initiative. Over 60% of the faculty members teach Advanced Placement (AP) and other college level courses.

Academic program: Students advance beyond the core curriculum by taking four years of mathematics and a wide array of STEAM, AP, and Dual-Enrollment courses in all subject areas, along with the option of participating in the Science & Engineering Research Program, in which students compete in the NYC Science and Engineering Fair, Regeneron Science Talent Search, Google, and Quality of Life competitions. All ninth grade students take an Intensive Writing course and College Board's Common Core-aligned SpringBoard English Language Arts curriculum, which prepares all students for AP Language and AP Literature and Composition curricula, as well as the SAT. All students graduate with at least two or three AP Social Studies courses and take three years of Russian language.

The Pre-Engineering STEAM program features Robotics, AutoCAD, Digital-Analog Electronics, TV Studio Engineering, IT Mouse Squad, and Computer Science courses as well as an extensive Work Based Learning (WBL) College and Career Exploration sequence featuring career talks, job shadowing, career and college fairs, as well as internships. All students participate in the Pre-Engineering STEAM program.

Partnerships with CUNY College Now, SUNY University in the High School, St. John's University College Advantage and the College of St. Rose provide students with the opportunity to earn and graduate with 15 to 60 college credits.

**Extracurricular activities:** The extracurricular program features over 100 afterschool clubs and activities (e.g., robotics, debate, Science/Russian Olympiad) and 46 PSAL teams. The Student Organization, National Honor Society and Junior Statesmen of America serve as the pipeline for our student leaders, while students interested in the arts can participate in nine different bands, including jazz, marching band and ensembles, as well as theatrical productions.

**2018 Admissions:** 16,007 students listed Staten Island Technical High School as a choice on the SHSAT, and 326 offers were made.

## STUYVESANT HIGH SCHOOL

**345 Chambers Street, New York, New York 10282-1099 Phone:** (212) 312-4800 ■ **Website:** www.stuy.edu

Email: 02M475@schools.nyc.gov

**Overview:** Stuyvesant High School's mission is to provide students with a rigorous curriculum that nurtures and rewards

their intellectual curiosity. Although Stuyvesant is historically recognized for its strengths in math, science, and technology instruction, the school also has a dynamic and diverse humanities program, as well as unique educational opportunities outside the classroom.

Academic program: The school's enriched curriculum includes required courses for graduation and also affords its students the opportunity to take many advanced courses and electives in various subjects. These course selections include Science Research, Multivariate Calculus, Organic Chemistry, Existentialism, Engineering, and Genetics, in addition to a wide array of Advanced Placement courses.

Extracurricular activities: The school is proud of its 42 PSAL sports teams and extensive extracurricular activities such as Robotics, Math Team, Speech and Debate, Science Olympiad, Chess, Model UN, and Junior State of America. There are a number of major publications, over 190 student-run clubs, and an active student government. Students interested in music and art may participate in one of 12 musical ensembles, including symphonic band, symphony orchestra, jazz band, and a number of choral groups, as well as join the Stuyvesant Theater Community, which presents three major productions yearly, including a musical, drama, and comedy.

**2018 Admissions:** 23,067 students listed Stuyvesant High School as a choice on the SHSAT, and 902 offers were made.

# FIORELLO H. LAGUARDIA HIGH SCHOOL OF MUSIC & ART AND PERFORMING ARTS

100 Amsterdam Avenue, New York, New York 10023
Phone: (212) 496-0700 ■ Website: www.laguardiahs.org
Email: admissions@laguardiahs.org

The Fiorello H. LaGuardia High School of Music & Art and Performing Arts enjoys an international reputation as the first and foremost high school committed to nurturing students dedicated to the arts. LaGuardia High School's dual mission provides a uniquely balanced educational experience that includes both demanding conservatory-style training and a rigorous, comprehensive academic program.

Studio Programs: Students in the Dance program study ballet and modern dance; supplementary courses include professional skills, dance history, choreography, theater dance (tap and jazz), career management, and repertory. Students in the Drama program focus on theater preparation through courses in acting, voice and diction, physical techniques, theater history, musical theater, acting on film, and script analysis. Students in the Fine Arts program receive the first two years of training in traditional and foundational skills and media. These include, but are not limited to, drawing, painting

in water-based media, graphic design, and painting in oils and acrylics. After taking the core art courses, students round out their arts education with advanced courses in the subjects listed above and with other elective offerings, such as architecture, art history, ceramics, computer graphics, mural painting, photography, print making, and sculpture. Students in the **Technical Theater** program receive practical training in scenic carpentry, lighting technology, costume construction, sound properties, stage management, technical drawing, and design. Upon successful completion of this program, students may receive a Career and Technical Education (CTE) endorsed diploma. Technical Theater students participate in both the production and the performance aspects for various LaGuardia High School events. Students in the Instrumental Music program study sight singing, music theory, and music history. The Instrumental Music Studio performing groups include Senior Orchestra, Junior Orchestra, Intermediate Orchestra, Elementary Orchestra, Senior Band, Junior Band, Intermediate Band, Senior Jazz Band, Junior Jazz Band, and two Pit Orchestras. Students in the Vocal Music program study sightsinging, music theory, and music history. Studio performing groups include Elementary, Mixed, Girls, Women's, and Senior Choruses. In voice classes, students receive training in Italian, German, and French vocal literature. Both Vocal and Instrumental Music elective courses include Chamber Music, Guitar, Soundlab Recording Studio, Music Technology, New Music Ensemble, Show Choir, Solo Voice, Audition Preparation, Gospel Choir, Piano, Songwriting, and an Opera production. Students also have the opportunity to compose, conduct, and perform original repertoire.

Each studio requires a substantial time commitment after school, in addition to multiple periods of study during the school day. Requirements include, but are not limited to, rehearsals and performances, as well as the practical application of technical theater and gallery management techniques. Longer school days are expected during performance times, and students are required to be present and participate in program-related, after-school performances and activities. Upon successful completion of graduation requirements, studio coursework, and examinations, students may receive the Chancellor's Arts Endorsement.

**Auditions** will be held at the LaGuardia High School campus in Manhattan. Students must register for auditions with their school counselors. See pages 14-16 for LaGuardia High School audition information.

Academic program: LaGuardia High School students exceed the NYC Department of Education's College and Career Readiness Benchmarks. These benchmarks, as outlined by the DOE, define the qualities and achievements that students need to complete in order to be ready to enroll, persist, and succeed in college, postsecondary training opportunities, and gain entry into meaningful careers. The school's rigorous academic program includes required courses for graduation, CUNY College Credit Bearing Courses, as well as over 24 Advanced Placement (AP) courses in the following subjects: Art History; Biology; Calculus AB and BC; Chemistry; Computer Science Principles; English Language; English Literature; Environmental Science; Government & Politics; Human Geography; Language and Culture in Italian, French, and Spanish; Music Theory; Physics; Psychology; Statistics; Studio Art Drawing and 2-D; US History; and World History.

Students complete this course load in addition to their studio majors.

**Extracurricular activities:** Students actively engage in 22 PSAL sports teams and an extensive array of extracurricular activities such as Math Team, Science Olympiad, GSA, and ARCHON and ARISTA Honor Societies. Students participate in over 50 student-run clubs and student government.

**2018 Admissions:** 1,015 students received one or more offers to the programs at LaGuardia High School from a pool of 11,881 students who registered for an audition.