

BERGEN COUNTY ACADEMIES

Academy for Medical Science Technology

CEEB Code 310452

CLASS of 2016 PROFILE

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School and Community

A model for innovation and reform in the 21st century, the Academy for Medical Science Technology (AMST) is part of the Bergen County Academies (BCA), located in a multicultural suburban community within 5 miles of New York City. Students are accepted from across the county and commute up to twenty miles to a diverse public magnet school of choice with an enrollment of 1,050 students. BCA features career-focused academies operating as a cohesive unit to provide a dynamic, specialized, student-centered environment. Applicants from seventy towns in Bergen County are selected through a rigorous admissions process that considers middle school grades, standardized test scores, interviews, as well as assessments in writing and math. BCA has an extended school day from 8:00 am until 4:10 pm. Underclassmen, grades 9–11, devote Wednesday mornings to interdisciplinary projects and independent research. The faculty has many years of experience as instructors and industry leaders.

Curriculum

AMST's program of study is a system-based approach to medicine that allows students to learn the basic sciences in an integrated format. Students take rigorous academic requirements in mathematics, humanities, foreign language and the arts. Transdisciplinary class-wide projects, from ninth through eleventh grade, develop teamwork, communication and presentation skills promoting an integrated, multi-dimensional approach to learning. All students complete core areas, complemented by required units in humanities, creative cultural arts, physical education, health, projects, and also choose electives each trimester. All academic courses are taught at the honors level or above.

Research

The Research programs at the Bergen County Academies operate within highly sophisticated, state-of-the-art laboratories that have been designed and equipped to allow exploration within a variety of scientific disciplines. The labs are functional, professional entities, not normally found in a high school setting. They include cell and molecular biology, nanotechnology, chemistry, materials science, microscopy and a variety of engineering programs. Many of our students have won significant national and international awards, and some have been able to publish their findings in professional journals.

ACT / SAT COMBINED TEST RESULTS

Test	State	Nation	AMST
ACT	23.2	21.0	32
SAT	1520	1490	2101

SAT Score Summary – Class of 2015 – AMST

Critical Reading	Math	Writing
Average: 670	8 Perfect Scores Average: 726	5 Perfect Scores Average: 705

BCA Highlights

- A highly competitive, diverse public magnet high school which typically accepts 250 of the over 1500 students who apply
- Named a 2015 National Blue Ribbon School of Excellence by the U.S. Department of Education
- Named a Model School in the Arts by the N.J. Department of Education
- Home of a 2015 Gold Medal Winner of the International Math Olympiad.
- Home of the 2013 Winner of the International Biology Olympiad.
- Home of Two 2014 National Intel Science Talent Search Finalists
- Ranked #5 in the Nation on the list of America's Top High Schools by Newsweek
- Ranked #1 in New Jersey, #2 in the Northeast and #15 in the Nation on the list of Top High Schools by The Daily Beast
- Member of the National Consortium of Secondary STEM Schools (NCSSS)

Highest Level Courses Available

Advanced Math Topics	Lin Alg/Diff Equation	Organic Chemistry
AP Calculus BC+	Multivariable Calculus	Research
Data Structures	Nanotechnology	Topics in Adv Math

Advanced Placement Courses

AP Art History	AP Computer Science	AP Physics C
AP Biology	AP Macro Economics	AP Psychology
AP Calculus AB, BC	AP Micro Economics	AP Statistics
AP Chemistry	AP Music Theory	AP Studio Art

International Baccalaureate Courses

IB Environmental Systems	IB Literature	IB French
IB History	IB Math	IB Spanish

In May 2015, 269 students took a total of 635 IB exams (5.39 average) and 493 students took a total of 904 AP exams (4.26 average).

A note about International Baccalaureate courses: Students may choose to challenge themselves by taking IB courses, even though the Academy for Medical Science Technology does not offer the opportunity to earn an IB Diploma.

Due to the number of core course requirements, even the most ambitious students may have limited access to Advanced Placement (AP) courses and International Baccalaureate (IB) courses.

Graduation Requirements

The requirements of AMST exceed state graduation requirements.

English	4 years	Biology	1 year
Mathematics	4 years	Technology	2 years
Social Studies	3 years	Senior Internship	1 year
World Language	3 years	Creative Arts	1 year
Core Medical Courses	3 years	P.E. / Health	4 years
Chemistry	2 years	Community Service	40 hours
Physics	2 years		
Cell Physiology	1 year		

AMST Accolades

- 1 Intel Science Talent Search Finalist
- 3 Intel Science Talent Search Semifinalists
- 2 Siemens Competition Semifinalists
- 2 Intel International Sci & Eng Fair Finalists
- 2 BioGENEius National Finalists
- 20 Health Occupation Students of America National Finalists
- 1st Place and 3 3rd Place Winners at New Jersey Academy of Science Annual Meeting

Full Year - All Day Senior Internships

All of our seniors devote Wednesdays to a yearlong individualized internship experience. Students receive (9) academic credits for this supervised graduation requirement. Over two hundred employers offer experiential learning opportunities in research centers, hospitals, universities, non-profit organizations, government agencies, major corporations and large and small businesses in the NY/NJ metropolitan area.

Grading System

Students are NOT RANKED because of the selectivity of the admissions process. Grade point averages are calculated yearly based on the final grade attained in each course. Cumulative GPA is an unweighted calculation which includes academic courses only. 4.0 is the highest possible GPA. Each trimester students who achieve an A in each of their courses are distinguished by being named to the Academy High Honor Roll which is the school's highest academic honor.

Grade Key

A = 4.00 B+ = 3.33 C+ = 2.33 D+ = 1.33 P = Pass
 A- = 3.80 B = 3.00 C = 2.00 D = 1.00 I = Incomplete
 B- = 2.80 C- = 1.80 F = 0.00 W = Withdraw

AMST Grade Frequency Distribution

GPA Ranges	Frequency
4.000 - 3.900	37%
3.899 - 3.800	12%
3.799 - 3.700	11%
3.699 - 3.600	11%
3.599 - below	29%

AMST • College Acceptances and Enrollment • Class of 2015

Accepted (A) Matriculated (M)

	A	M		A	M		A	M
Albany College of Pharmacy	1		Loyola Marymount University	1		Tulane University	1	
American University	1		Macalester College	1		Union College	3	1
Amherst College	2	1	Marist College	1		University of California, Berkeley	1	
Barnard College	2	1	Mass. College of Pharm & Health Sci	2		University of California, Los Angeles	1	
Bates College	1		Middlebury College	2		University of California, San Diego	1	
Binghamton University	1	1	Montclair State University	1		University of Chicago	1	
Bloomfield College	1		Mount Holyoke College	1		University of Connecticut	2	
Boston College	3		Muhlenberg College	1		University of Delaware	1	
Boston University	11	1	New Jersey Institute of Technology	1	1	University of Edinburgh	1	
Bowdoin College	1		New York Institute of Technology	1		University of Glasgow	1	
Brandeis University	2	1	New York University	5		University of Maine	1	
Brown University	2	1	Northeastern University	19	3	University of Maryland, College Park	1	
Bryn Mawr College	1		Northwestern University	3	2	University of Miami	2	
Bucknell University	1		Pepperdine University	1		University of Michigan	2	1
Case Western Reserve University	2		Pomona College	1	1	University of Minnesota	1	
Clark University	1		Princeton University	4	3	University of New Haven	1	
Colby College	3		Purdue University	2		University of Notre Dame	4	3
Colgate University	3		Quinnipiac University	3		University of Pennsylvania	1	1
College of the Holy Cross	1		Ramapo College of New Jersey	1		University of Pittsburgh	4	
College of William and Mary	2		Rice University	1		University of Richmond	1	
Columbia University	2	2	Rutgers, The State University of NJ	40	9	University of Rochester	10	2
Cornell University	4	1	Seton Hall University	1		University of the Sciences	7	
Davidson College	1		Siena College	1		University of Toronto	1	1
Drexel University	12	1	St. John's University	2		University of Vermont	3	
Emory University	2	1	Stevens Institute of Technology	1		University of Virginia	1	
Fairleigh Dickinson University	2		Stony Brook University	3		University of Wisconsin	1	
Fordham University	14	2	Swarthmore College	1		Ursinus College	1	
Franklin and Marshall College	2		Temple University	2		Vanderbilt University	1	
Georgetown University	2		The College of New Jersey	15	3	Vassar College	2	
Harvard University	1	1	The George Washington University	4		Villanova University	7	1
Haverford College	2		The Ohio State University	1		Virginia Commonwealth University	1	
Hofstra University	1		The Pennsylvania State University	3		Washington College	1	
Iona College	1		The Royal Veterinary College	1		Washington University in St. Louis	3	1
Johns Hopkins University	3	2	The University of Alabama	1		Wellesley College	2	2
King's College London	1	1	The University of NC at Chapel Hill	2		Wesleyan University	2	
Lafayette College	1		The University of Scranton	1		William Paterson University	2	
Lehigh University	2		Tufts University	3	2	Williams College	2	

307 Acceptances for 54 Students