

BERGEN COUNTY ACADEMIES

CLASS OF 2023 PROFILE



ABOUT US

1119 STUDENTS





22%
ACCEPTANCE
RATE





ONE SCHOOL, SEVEN ACADEMIES

- Academy for the Advancement of Science & Technology (AAST)
- Academy for Business and Finance (ABF)
- Academy for Culinary Arts & Hospitality Administration (ACAHA)
- Academy for Engineering & Design Technology (AEDT)
- Academy for Medical Science Technology (AMST)
- Academy for Technology & Computer Science (ATCS)
- Academy for Visual & Performing Arts (AVPA)

CLASS OF 2023 STATS



NATIONAL MERIT 32

33 AVERAGE

1475 AVERAGE 722 EBRW 753 MATH

130+ CLUBS AND ORGANIZATIONS



9 BEST PUBLIC HIGH SCHOOL IN AMERICA 2022



STUDENTS ENROLLING 99.3%





BASED ON IN-HOUSE RESEARCH



12

REGENERON/INTEL NATIONAL FINALISTS SINCE 2010

CONTACT US

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WHAT MAKES US SPECIAL?

RESEARCH 🔠

A particularly significant aspect of our research program is that the students select the problems that they will be studying and do not receive preliminary data for their projects. The labs at BCA are functional, professional entities not normally found in a high school setting. They include agriscience, mechatronics, optics, nanotechnology, stem cell (which includes flow cytometry and DNA microarray analysis), nanostructural imaging (which includes a Scanning Electron Microscope (SEM) and Transmission Electron Microscope (TEM)), a Financial Markets Lab (equipped with a Bloomberg terminal), and a variety of other research opportunities. Our research program has produced three Presidential Scholars, twelve Regeneron STS Finalists (four in the Top Ten), over 100 Regeneron STS Scholars, six Davidson Fellows, numerous publications in peer reviewed journals, a participant in the White House Science Fair, and a patent-the result of a student's original research.

GLOBAL EXCHANGES

BCA offers an increasingly expanding array of opportunities to participate in global exchanges with partner schools across the world. Students collaborate on research projects and presentations in advance. Recent global exchanges include Japan, Singapore, UK, Hong Kong, Israel, and the UAE.

SENIOR INTERNSHIP

All of our seniors devote Wednesdays to a yearlong individualized internship experience called Senior Experience. Seniors 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.

ELECTIVES



BCA students enrich their education and pursue their interests by selecting from an array of electives in art, humanities, math, research, science, and technology. Students can choose from over eighty elective courses in visual, performing, and culinary arts, music, physics, engineering and robotics, computer science, psychology, business, the study of languages and cultures, agricultural science, biology, and chemistry.

PROJECTS



During their first three years at the Academies, students will spend two hours every Wednesday working on an interdisciplinary project. Students have the opportunity to choose a different project each trimester.

ACADEMIC INFORMATION

GRADING

- From March 2020-March 2021 BCA operated remotely
- From March 2021-June 2021 BCA was hybrid and students were given the choice to attend in-person or remotely
- In Trimester 3 of 2020, all classes were taught on a pass/fail basis with a pass translated into a grade of 99
- BCA operates on a trimester system and we do not send
 Trimester 1 grades to colleges until early January
- Students are NOT RANKED because of the selectivity of the admissions process
- GPA's are calculated yearly based on the final grade attained in each course
- GPA is unweighted and includes academic courses only
- 4.0 is the highest possible GPA
- D is the lowest passing grade

COURSES

- All academic courses are taught at the honors level or above
- All Academy programs far exceed NJ State graduation requirements
- Due to scope and sequence, students in some Academies may not be able to take the "Post AP/IB Courses" listed
- · 40 hour per year community service requirement

AP COURSES

AP Art History

AP Biology
AP Calculus AB, BC

AP Chemistry

AP Computer Science A

AP Government

AP Macroeconomics

AP Microeconomics AP Music Theory AP Physics C AP Psychology AP Statistics

IB COURSES

IB Economics HL

IB Environmental Systems SL

IB History HL

IB World Literature HL

IB Literature / Language HL

IB Computer Science SL

IB Math SL, HL

AP Studio Art

IB Business Mgt SL, HL

IB Physics SL

IB Spanish SL, HL

IB French SL, HL

IB Mandarin ab initio, SL

POST AP/IB COURSES

Advanced Math Topics AP Calculus BC+ Data Structures Lin Alg/Diff Equation Multivariable Calculus Organic Chemistry Advanced Prob Music

ACADEMY INFORMATION

AAST-SCIENCE

AAST students take multiple years of biology, chemistry and physics while completing studies in chemical engineering, organic chemistry and modern physics. Graduates from AAST are prepared to continue studies across a wide range of scientific disciplines. AP Chemistry is a requirement of the program. Throughout the curriculum, students are encouraged to find original answers to modern research challenges using the state of-the-art facilities available on campus.

ABF-BUSINESS

ABF students take business, finance, marketing, and economics classes as part of their core. Business principles are taught in multiple, high-level core courses which incorporate topics such as: the global business environment, management, marketing, finance, economics and entrepreneurship. ABF has incorporated an emphasis on a global perspective. The driving force behind this global component is the integration of the International Baccalaureate curriculum to an already rigorous course of study.

ACAHA-CULINARY ARTS AND HOSPITALITY

Students in the Academy for Culinary Arts and Hospitality Administration have a strong interest in culinary arts and restaurant/hospitality management. ACAHA Students are prepared for study in any area by an honors-level core curriculum, augmented by elective options in all facets of food preparation, facility management, customer service, and entrepreneurship. All students take IB Business Management and they may elect to participate in the IB Diploma program.

AEDT-ENGINEERING

AEDT students study courses in the engineering sciences, including design technology, computer science, manufacturing, electronics, and biomedical engineering. AEDT focuses on general engineering disciplines and prepares students for entrance into college engineering programs. Students in this academy have a concentration in engineering and design courses and focus on skills which are generally useful in any engineering curriculum. Projects include product development, civil or architectural designs, and robotic competitions.

AMST-MEDICINE

AMST students balance a rigorous science curriculum with scientific research to be best prepared for a future in the medical field. Students learn to design original scientific experiments and carry them out in a high school setting. In addition to advanced level science classes, students take specialized academy-specific courses such as Experimental Biology, Anatomy and Physiology, Introduction to Surgical Techniques, and Pharmacology.

ATCS-COMPUTER SCIENCE

ATCS students develop a strong foundational understanding of programming, computer architecture, data structures and algorithms, and program analysis. The program is oriented around underlying ideas that will never become obsolete, even as technologies change. Throughout their careers at BCA, students extend their skills in computing through projects and electives of their choice, often including processor design, web application development, robotics, computer security, and mechatronics. The Senior Capstone is a culmination in which the students work in groups to develop a product for a client.

AVPA-MUSIC

AVPA Music students have an outstanding ability in music and are some of the strongest musicians in their communities. Students learn woodwind, brass, string and percussion instruments. They study college-level music theory, which includes harmonic analysis, counterpoint, voice leading and ear training. Students also learn current technological and composition techniques in electronic music synthesis where they work with state-of-the-art software.

AVPA-THEATRE

AVPA Theatre students participate in a rigorous training program for students interested in pursuing a college major in theatre or film leading to a career in some aspect of the entertainment industry. Core courses include sequences in acting, dance, voice and speech, musical theatre, theatre history, theatrical design, dramatic writing, and directing. Students are introduced to a variety of methods most productive for their individual growth.

AVPA-VISUAL

AVPA Visual students study essential aspects of the visual arts through immersion in a curriculum that embraces new technologies, while emphasizing traditional skills and principles of art and design. The program allows students to pursue their passion in any one of a broad range of arts including graphic and web design, illustration, photography, animation/video, game design, package design, virtual reality, traditional/fine arts, and art history.

COLLEGE ENROLLMENTS 2019-2022

Amherst College	4	Massachusetts Institute of Tech	17	University of California-Santa Barbar	'a 1
Arizona State University	1	Miami University, Oxford	2	University of California Santa Barbar	1
Babson College	3	Middlebury College	1	University of Chicago	6
Barnard College	7	Montclair State University	6	University of Colorado Boulder	1
Baylor University	1	Montserrat College of Art	1	University of Connecticut	7
Bentley University	1	Muhlenberg College	7	University of Florida	2
Bergen Community College	7	Nebraska Wesleyan University	1	University of Georgia	1
Binghamton University	3	New Jersey Institute of Technology	27	University of Illinois	4
Boston College	18	New York Institute of Technology	1	University of Maryland-College Park	9
Boston Conservatory at Berklee	2	New York University	43	University of Massachusetts-Amherst	
Boston University	23	Northeastern University	54	University of Miami	5
Bowdoin College	1	Northwestern University	9	University of Michigan	27
Brandeis University	2	Nova Southeastern University	2	University of Minnesota	1
Brown University	11	Oberlin College	2	University of Missouri	1
Bucknell University	2	Ohio State University	2	University of Notre Dame	4
California Institute of Technology	2	Pennsylvania State University	12	University of Pennsylvania	15
California Institute of the Arts	2	Pepperdine University	1	University of Pittsburgh	6
Carnegie Mellon University	16	Point Park University	1	University of Rhode Island	2
Case Western Reserve University	4	Pratt Institute	2	University of Richmond	1
Champlain College	1	Princeton University	12	University of Rochester	7
Chapman University	1	Purdue University	8	University of Scranton	1
Colby College	1	Ramapo College of New Jersey	4	University of South Carolina	2
Colgate University	1	Rensselaer Polytechnic Institute	11	University of South Florida	1
College of the Holy Cross	1	Rhode Island School of Design	6	University of Southern California	13
Columbia College Chicago	1	Rice University	5	University of the Sciences	1
Columbia University	15	Rider University	1	University of Vermont	2
Cooper Union	10	Ringling College of Art and Design	2	University of Virginias	2
Cornell University	57	Rochester Institute of Technology	7	University of Wisconsin	5
Culinary Institute of America	1	Rowan University	3	Ursinus College	1
CUNY Brooklyn College	2	Rutgers University-New Brunswick	123	Vanderbilt University	13
CUNY John Jay College	1	Rutgers University-Newark	6	Vassar College	3
CUNY Macaulay Honors College	1	San Diego State University	2	Villanova University	8
Dartmouth College	4	School of Visual Arts	2	Virginia Polytechnic Institute	1
Drew University Drexel University	4 11	Seton Hall University Siena College	5 2	Wagner College Wake Forest University	1
Duke University	9	Skidmore College	2	-	1 2
Eckerd College	1	Smith College	1	Washington and Lee University Washington University in St Louis	11
Elon University	2	Southern Methodist University	1	Webb Institute	1
Emerson College	6	St. John's University-New York	1	Wellesley College	2
Emory University	5	Stanford University	5	Wesleyan University	2
Fairleigh Dickinson University	2	Stevens Institute of Technology	34	Western Colorado University	1
Fashion Institute of Technology	_ 1	Stony Brook University	2	William & Mary	2
Florida Southern College	2	Swarthmore College	2	William Paterson University	1
Fordham University	10	Temple University	2	Williams College	2
Franklin W Olin College	1	The Catholic University of America	1	Worcester Polytechnic Institute	3
George Washington University	8	The College of New Jersey	7	Yale University	11
Georgetown University	11	The Juilliard School	3	,	
Georgia Institute of Technology	9	The New England Conservatory	1	International	
Grinnell College	1	The New School	1	City University of London	1
Harvard University	24	The University of North Carolina	4	Durham University	1
Hofstra University	2	The University of Tampa	1	EHL	1
Howard University	3	The University of Texas at Austin	6	King's College London	1
Indiana University-Bloomington	3	The University of Texas at Dallas	2	McGill University	4
Ithaca College	2	Tufts University	14	NYU Abu Dhabi	1
Johns Hopkins University	4	Tulane University of Louisiana	2	Universita Bocconi	2
Johnson & Wales University	1	Union College	2	Universiteit van Amsterdam	1
King's College	1	United States Military Academy	1	University of Oxford	3
Lehigh University	3	University at Buffalo	1	University of Toronto	1
Liberty University	1	University of California-Berkeley	16	University of Ulster	1
Loyola Marymount University	1	University of California-Irvine	2	Yonsei University-Underwood	2
Manhattan College	2	University of California - Los Angeles			
Marymount Manhattan College	1	University of California-San Diego	5		