# BERGEN COUNTY ACADEMIES



# **Academy for Technology and Computer Science**

**CEEB Code 310451** 

## **CLASS of 2016 PROFILE**

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www.bergen.org/bca



### **School and Community**

A model for innovation and reform in the 21st century, the Academy for Technology and Computer Science (ATCS) 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 careerfocused 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

ATCS's college preparatory curriculum includes a strong core that balances technology and computer science courses studied simultaneously with a synergy of rigorous academic requirements in mathematics, humanities, world language and the arts. Recently, students created and implemented a working prototype of the Smart Structure networking and programming project which many companies have already begun to study. In addition, transdisciplinary class-wide projects, from ninth through eleventh grade, develop teamwork, communication and presentation skills, promoting an integrated, multi-dimensional approach to issues and learning. All students complete core areas, complemented by required units in creative cultural arts, humanities, physical education, health, projects, and also choose electives each trimester. All academic courses are taught at the honors level or above.

### **ACT / SAT COMBINED TEST RESULTS**

Test	State	Nation	ATCS
ACT	23.2	21.0	30
SAT	1520	1490	2106

### SAT Score Summary - Class of 2015 - ATCS

Critical Reading	Math	Writing
3 Perfect Scores	3 Perfect Scores	1 Perfect Score
Average: 682	Average: 751	Average: 673

### **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)

#### **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	IB Literature	IB Spanish
Systems	IB Math	IB French
IB History		

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 Technology and Computer Science 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 ATCS exceed state graduation requirements.

Mathematics4 years	Chemistry 1 year
Mainemanes4 years	
Technology/Computer	Physics 1 year
Science Focus4 years	Technology2 years
English4 years	Creative Arts 1 year
P.E. / Health4 years	Senior Internship 1 year
Social Studies3 years	Community Service 40 hours
World Language3 years	
Biology 1 year	

#### **ATCS Accolades**

2nd Place Special Computing award New Jersey Regional Science Fair 2014-2015

American Computer Science League's All-Star Contest: Senior Team placed 5th in the World and 1st in the northeastern region and Intermediate team placed 1st in the State and 9th in the world

National Center for Women & Information Technology Competition: National winner plus 3 state finalists

### **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 = Withdrew

### **ATCS Grade Frequency Distribution**

GPA Ranges	Frequency
4.000 - 3.900	11%
3.899 - 3.800	0%
3.799 - 3.700	26%
3.699 - 3.600	21%
3.599 - below	42%

## ATCS • College Acceptances and Enrollment • Class of 2015

Accepted (A) Matriculated (M)

	Δ	M	Accepted (A) Matriculated (M)	Δ	M		Δ	M
Arcadia University	1	141	Rensselaer Polytechnic Institute	3	1	University of Delaware	1	171
Boston University	1		Rochester Institute of Technology	4	1	University of Illinois at Urbana-Champaig	n 3	
Carnegie Mellon University	2	1	Rutgers, The State University of NJ	14	2	University of Maryland, College Park	4	1
Clark University	2	1	Seton Hall University	1		University of Massachusetts	3	
Cornell University	1		Stevens Institute of Technology	10	)	University of Michigan	2	
Drexel University	1		Stonehill College	1		University of Rochester	1	
Emory University	1		Stony Brook University	3		University of San Francisco	1	
Fordham University	4		The College of New Jersey	2		University of Southern California	1	
Georgia Institute of Technology	1	1	The Cooper Union	1		Villanova University	1	
Lehigh University	2	1	The George Washington University	1		Yale University	1	1
Manhattan College	1		The University of Texas, Austin	1				
Marist College	2		Tufts University	1	1			
New Jersey Institute of Technology	2	2	University of California, Berkeley	2	2			
New York University	3	1	University of California, Los Angeles	1				
Northeastern University	6	3	University of California, San Diego	1				
Quinnipiac University	1		University of California, Santa Cruz	1				
Ramapo College of New Jersey	1	1	University of Connecticut	1	1			