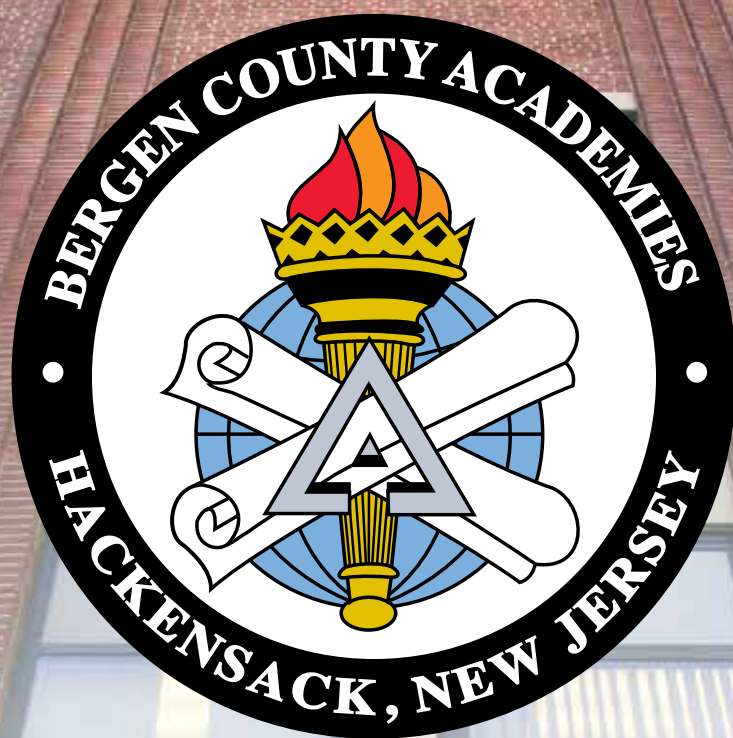


# BERGEN COUNTY ACADEMIES

## 2020-2021 INFORMATION AT A GLANCE



**BELIEVE, CREATE,  
ACHIEVE**

BERGEN COUNTY TECHNICAL HIGH SCHOOL DISTRICT

Dr. John Grieco Campus • 200 Hackensack Avenue, Hackensack, New Jersey 07601

201-343-6000 • [www.bergen.org](http://www.bergen.org)



*The Bergen County Technical School District does not discriminate on the basis of race, age, creed, religion, ancestry, national origin, socioeconomic status, affectational or sexual orientation, gender, disability, or marital status.*



# AN ACADEMIES EDUCATION

The Bergen County Academies offers students a unique high school experience that combines comprehensive academics with technical and professional courses. We encourage our students to choose an academy concentration based upon their interests rather than a future career choice.

Pursue your passion for science, art, computers, music, theatre, cooking, design, or finance—our programs will allow you to explore your interest while preparing you to meet the academic challenge of college. You may complement your studies with electives and clubs that cross academy boundaries; you are not limited to study in just one field. Students receive a fine academic background that prepares them well for postsecondary study in any field they choose.

## THE ACADEMIES:

### AAST

Academy for the Advancement of Science and Technology

### ABF

Academy for Business and Finance

### ACHA

Academy for Culinary Arts and Hospitality Administration

### AEDT

Academy for Engineering Design Technology

### AMST

Academy for Medical Science Technology

### ATCS

Academy for Technology and Computer Science

### AVPA

Academy for Visual and Performing Arts

*For information on our curriculum and laboratory facilities, please visit our website: <http://bcts.bergen.org>.*



Dr. John Grieco

*Bergen County Academies is committed to following the visionary leadership of Dr. John Grieco, who served as Superintendent from 1984-2004.*

# PROGRAM DESCRIPTIONS

The Bergen County Academies offers students a unique high school experience that combines comprehensive academic with technical and professional courses. We encourage our students to choose an academy concentration based upon their interest rather than a future career choice.

Pursue your passion - our programs will allow you to explore your interests while preparing you for your future college academics. You may accompany your studies with electives and clubs that cross academy boundaries; you will not be limited to study in just one field.

This guide is designed to provide students and parents/guardians an understanding of our programs. Bergen County Academies takes pride in the high standards achieved year after year. Information in this booklet may be subject to change as our programs evolve to match skills dictated by new technologies.

*For complete program descriptions, please visit our web site: <http://bcts.bergen.org>*

## AAST ACADEMY FOR THE ADVANCEMENT OF SCIENCE AND TECHNOLOGY



Students applying to AAST should have a passion for learning in general and a curiosity for the sciences in particular. The AAST curriculum is unique at BCA in that it is the only academy that provides in-depth instruction in all three sciences, biology, chemistry, and physics, by the end of sophomore year. This strong and early foundation across the sciences empowers AAST students to pursue advanced classes, group projects, and research as soon as sophomore year. Equally important is the flexibility that every AAST student enjoys to pursue classes in computer science, advanced mathematics, and the humanities to explore their individual and growing interests. Highlights of the AAST curriculum include:

- 9th grade students take courses in Biology and Chemistry that feature a weekly rotating lab period in both sciences.
- 10th grade students take courses in Physics and Chemistry that also feature a weekly lab rotation. The 10th grade Chemistry class goes beyond typical high school courses by exploring topics related to Chemical Engineering and Materials Science.
- 11th and 12th grade students pursue advanced classes through

a variety of options including Advanced Placement (AP) Chemistry, AP Physics, AP Biology, AP Computer Science, International Baccalaureate (IB) Physics, IB Environmental Science, and IB Computer Science.

In addition to the core aspects of the AAST curriculum, many AAST students conduct on-campus research at the Bergen County Academies in modern facilities dedicated to nanotechnology, optics, agricultural science, mechanical engineering, electrical engineering, and cellular and molecular biology. The accomplishments of AAST students are consistently acknowledged at the state, national, and international levels including finalist recognition at the Regeneron Science Talent Search and the International Chemistry Olympiad. Beyond the walls of Bergen County Academies, AAST students interact and collaborate with experts at prestigious institutions including Columbia University, Princeton University, Brookhaven National Lab, and the American Museum of Natural History through our Senior Internship and other unique opportunities. Since its inception in 1992, graduates of AAST have attended the full list of outstanding colleges and universities on their way to careers in science, engineering, medicine, finance, law, journalism, and so much more.





# ABF

## ACADEMY FOR BUSINESS AND FINANCE (INTERNATIONAL BACCALAUREATE)



This Academy provides a focus on business and finance within an integrated and comprehensive academic program. Students typically have a strong aptitude for mathematics, possess advanced writing and communication skills, and are interested in business, finance, marketing, and economics. Business principles are taught in multiple, high-level core courses which incorporate disciplines such as: corporate finance, financial markets, money and banking, economics, marketing, management information systems and entrepreneurship. Students often become involved in a variety of national and international business and economic competitions such as the High-School Federal Reserve Challenge, the Euro Challenge and the Fairleigh Dickinson University Business Idea



program. They also participate in nationally-recognized business organizations such as DECA (an association of marketing students).

ABF has incorporated an emphasis on a global perspective. The driving force behind this global component is the integration of the International Baccalaureate curriculum within an already rigorous course of study. The IB Diploma Program, in which most ABF 11th and 12th graders enroll, is an internationally recognized degree program administered by the International Baccalaureate Organization in Geneva, Switzerland. To earn the IB diploma, students must complete a two year sequence of courses in humanities, math, and science. In addition, ABF students are required to complete a senior thesis and a unique class

on interdisciplinary analysis, as well as requirements in the arts, community service, and athletics.

A unique feature of our Academy is the Financial Markets Lab. Our lab is equipped with Bloomberg technology, a resource utilized by finance professionals worldwide; it enables our students to conduct economic and financial research and analysis using real-time economic and market data and sophisticated analytic tools. Our proximity to New York City offers our students opportunities to visit and establish internships with some of the world's leading financial institutions. Furthermore, our global studies program offers students the opportunity to gain exposure to the international business community.



## ACAHA

### ACADEMY FOR CULINARY ARTS AND HOSPITALITY ADMINISTRATION



This Academy provides an insight into the Hospitality Industry in addition to an in-depth study of all facets of hospitality management, entrepreneurship, and advanced culinary / pastry arts. This academy is ideal for those who are passionate about hospitality; one of the largest global industries and employers. ACAHA students often become involved with a variety of leadership, community

service, state and national competitions such as the ProStart Hospitality Management state and national competition and the state and national SkillsUSA Leadership Conferences.

Students train in a sophisticated culinary facility that rivals many professional restaurants. The curriculum includes Foundations of Hospitality and Restaurant Management along with International Baccalaureate business management courses. International Baccalaureate Diploma is optional for ACAHA students. Electives in AP Micro and Macro Economics are recommended. The ACAHA course of study leads to certification from the National Restaurant Association Education Foundation, which can lead to hospitality scholarship opportunities. The students will be enrolled in an on-line class and receive a ServSafe Managers certification. Articulation agreements with universities enable students to receive college credit or advanced standing. One of the highlights of the ACAHA experience is taking part in the coveted annual BCA Chocolate Competition. ACAHA students will collaborate with the Engineering Academy to augment their creative project, which are often compared to cake projects on the Food Network!

For students interested in a career in hospitality management or the culinary arts, ACAHA offers the best possible preparation for college hospitality programs such as Cornell University's School of Hotel Administration, Boston University, NYU, Penn State University and the Ecole hoteliere de Lausanne (EHL) in Switzerland, to name a few. While at the Academies, ACAHA seniors take part in BCA's Senior Experience program and have interned at the Black Barn Restaurant, the Loews Regency Hotel, the New York Hilton Hotel, the Pearl River Hilton, and the Glenpointe Marriott.

## AEDT

### ACADEMY FOR ENGINEERING AND DESIGN TECHNOLOGY



The Academy of Engineering and Design Technology (AEDT) was developed as an extension of the Academy for the Advancement of Science and Technology (AAST) with specific concentration on the engineering sciences, including design technology, computer science, manufacturing and electronics. Students have a concentration in engineering and design courses and a focus on skills that are generally useful in any engineering curriculum.

Students are drawn to AEDT because they want the opportunity to create and build in innovative classrooms and laboratories. Projects include product development, civil or architectural designs, robotic competitions, and more. Students must have a strong desire to solve problems using math, science and technology. They should like to work with their hands, and apply their creativity to engineering. Organizational skills, such as maintaining computer files, keeping project journals and building portfolios are needed.

AEDT focuses on general engineering disciplines and prepares students for entrance into college engineering programs. Those that choose to go into this academy will have a solid background and are likely to successfully master college



engineering courses. Students are also prepared to pursue careers in the technical aspects of business or law. Articulation agreements with universities enable students to receive college credit for some of the core courses taken in this program.



# AMST

## ACADEMY FOR MEDICAL SCIENCE TECHNOLOGY

The program of study for the Academy for Medical Science Technology is designed for students interested in the medical field and/or the research sciences. The curriculum is infused with courses that reflect a medical science related focus including neuroscience, pharmacology, bioethics, epidemiology, and research science as well as projects that develop teamwork, communication and presentation skills



- In ninth grade, students have courses in STEM that include rotations in Epidemiology, Pharmacology and Bioethics in addition to a full year course in Biology. In Pharmacology students learn about pharmacokinetics, pharmacodynamics and pharmacogenomics, as well as common routes of administration, naming drugs, and clinical trials.
- In tenth grade, students rotate through Neuroscience and Biotechnology in addition to a full year course in Chemistry. The biotechnology course introduces students to fundamental practices in biotechnology, bioinformatics and statistical analysis. Biotech is a student centered, hands on course, during which students develop proficiency in sterile technique, ELISA, electrophoresis, PCR, DNA and protein isolation among others.
- In eleventh grade, students take a full year of Anatomy and Physiology in addition to a full year course in Physics. A hands-on lab-based course, Anatomy and Physiology provides a firm foundation in histology, physiology, and homeostasis in each of the human body systems.
- In grades eleven and twelve, students also typically pursue Advanced Placement courses in Chemistry, Biology and / or Physics.

Many AMST students participate in the “in-house” research program at the Bergen County Academy, in labs that are state of the art. The students may enter these labs as early as freshman year. Focus of includes cell and molecular biology, nanotechnology,

agriscience, optics, mechatronics, psychology, mathematics, and a variety of engineering disciplines. In the cell and molecular biology labs, students often use in vitro cell culture and carry out such assays as microarray and transfection and utilize TEM and SEM to investigate the scientific question they are addressing. Our students have won significant national and international awards at competitions including the Regeneron Science Talent Search, the Regeneron International Science and Engineering Fair, and BioGENEius. The high school innovators have been awarded Davidson Fellowships and have presented their research at meetings of professional organizations such as the American Association for Cancer Research (AACR). Many students have published their findings in peer reviewed, professional journals.

AMST students participate in the International leadership Organization for Future Healthcare Professionals (HOSA) which is recognized by the US Department of Education. The mission of the chapter is to promote the health care professions and community service. Members have successfully competed at the international level in areas such as Biomedical Debate, Creative Problem Solving, Pharmacology, Biomedical Lab Science, Nutrition, Sports Medicine, Mathematics, Dental Science and many more.



# ATCS

## ACADEMY FOR TECHNOLOGY AND COMPUTER SCIENCE

This program is ideal for students who have an interest in computers and programming. The Academy for Technology and Computer Science offers a curriculum that provides students with a strong foundation in the core concepts of computer science, experience in a broad variety of programming skills and paradigms, and a focus on the application of programming to practical challenges.

ATCS students develop a strong foundational understanding of programming, computer architecture, software engineering practices, data structures and algorithms, theory of computation, and program analysis. Throughout their careers at BCA, students extend their skills in computing through projects and electives of their choice, including such offerings as processor design, web application development, computer security, game development, and artificial intelligence.

The specific programming languages and development tools in the curriculum change frequently with the times, but they are not the heart of what our students learn. Our real focus is on important, fundamental ideas in the field of computer science, not just the latest fad in technology. Even though the tools we use are always changing, students can have confidence that the important ideas they learn in ATCS will never become outdated or obsolete.



- **Ninth graders** begin with an introductory course in computer programming. This course gently initiates students into a CS-approach to problem solving. No programming background is expected at the outset of this course, though accommodations are made for students who already have significant experience.

- **Tenth graders** continue by taking AP Computer Science A, which develops the students' understanding of Object Oriented Programming, and also takes a deep dive into Data Structures and Algorithms, giving students command of a large number of central ideas to programming and programming practice.



- **Eleventh graders** learn about a third programming paradigm: Functional Programming. They also turn their focus towards the mathematics and theoretical underpinnings of computer science, examining in depth how we can prove assertions about code, and exploring the fundamental capabilities (and limitations!) of computers.
- **Twelfth graders** pull together everything that they've learned by building a real-world product known as a Capstone. In the process, they research new technologies, learn industry-level methodologies for client and team collaboration, and finally present their complete product to industry professionals.

Because of their strong backgrounds in computer science, ATCS students have placed highly in prominent national and international competitions such as The International Computer Science Olympiad, Panasonic Challenge, the National Center for Women & Information Technology, the Future Business Leaders of America Competition, the US Airforce CyberPatriot Competition, and the American Computer Science League.

ATCS students are well prepared for any college computing major such as Computer Science, Computer Engineering, Electrical Engineering, Software Engineering, or Information Systems. Additionally, computers have worked their way into every facet of modern life. Even those students who decide not to pursue computer-related careers after high school still find that the technical skills they have acquired through the academy's curriculum prove immensely useful in any number of other fields.





# AVPA

## ACADEMY FOR VISUAL AND PERFORMING ARTS

AVPA offers three areas of concentration: Music, Theatre Arts, and Visual Arts.



**What is the AVPA-Music Program?** Students in this program study an academic, honors-level college preparatory curriculum with a focus in music. Students have core academic courses (usually at the honors level) as well as core music courses! The program is for students who possess a combination of musical talent, passion, activism, and immerse themselves in music activities. In addition to the regular BCA admission process, candidates must also undergo a music audition. More information is available online: [www.bergen.org/music](http://www.bergen.org/music).

- **9th graders** begin the program by enhancing their keyboard/piano skills in Digital Keyboarding. They also take Musicianship, a methods course where they learn to play woodwind, brass, string and percussion instruments. The course ends with a special project in music technology.
- **In 10th grade**, students take a rigorous AP Music Theory course and may earn college credit. They study college-level music theory, which includes harmonic analysis, counterpoint, voice leading and ear training. An exhibition of students' digital compositions is also part of the curriculum.
- **In 11th grade**, students go beyond the AP theory curriculum in Advanced Problems in Music Theory & Technology. Here, students delve into augmented sixth and Neapolitan chords, fugal composition techniques, and analysis of twentieth-century music. They also take Digital Recording Studio and learn how to make professional quality recordings of themselves and their peers. The AVPA-M program ensures a rounded arts education with Music & Society: a course that teaches the evolution of musical style with corresponding art and socio-political trends.
- **In 12th grade**, students take Conducting and learn techniques needed to direct large ensembles. Seniors also learn current technological and composition techniques in Electronic Music Synthesis where they work with state-of-the-art software, such as Finale. The course culminates with each student completing a formal composition. The 12th grade capstone course is Senior Music Seminar, where they each build a guitar, and take it home at the end of the course! Seniors also present their **AVPA-Music Senior Recital** - a graduation requirement assessed by professionals in the music field.

You can learn more about the AVPA-Music program by attending one of our open houses in the fall. Please note that the AVPA-M program is not a conservatory or a full-time performing arts program. We offer a college preparatory, academic honors program, with a focus in music.

We offer a college preparatory, academic honors program, with a focus in music. Please note that the AVPA-M program is not a conservatory or a full-time performing arts program.

**What kind of student do you accept into the AVPA-Music Program?** Academically talented students prepared for a challenging, college preparatory honors-level, academic curriculum. Students who have an outstanding ability in music- students we accept are some of the strongest musicians in their communities and participate in honors level ensemble and/or pre-college programs.

- Individuals who have demonstrated academic achievement
- Talented musicians who have achieved musical excellence (competition finalists, pre-college, awards, etc.)
- Students planning to study music in college.
- "Music is my life"
- Students with years of private music study continuing throughout high school.

**What kind of student do you produce?** College bound students prepared to succeed in college music programs. BCA graduates have gone on to study music at Berklee College of Music, Curtis Institute of Music, Eastman School of Music, Juilliard, Peabody Conservatory and Westminster Choir College. Many of our alumni are now touring musicians, music teachers, music business professionals, or avocational musicians working in other fields.



# AVPA

## ACADEMY FOR VISUAL AND PERFORMING ARTS

*AVPA offers three areas of concentration: Music, Theatre Arts, and Visual Arts.*

**What is the AVPA-Theatre Program?** The AVPA Theatre Arts concentration is a 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. In addition to studying with faculty members (all of whom have professional training and experience) AVPA theatre students work with outside industry professionals in every aspect of classwork and production. In addition to their coursework, students are required to participate, as performers and technicians, in at least two after school major theatrical productions over their time at BCA.

Our goal is to nurture creativity and imagination, develop skills and discipline, and emphasize process. Rather than provide students with a single technique we introduce young artists to a variety of methods (Viewpoints, Stanislavsky technique, monologue, and classical work), encouraging them to learn to work in ways most productive for their individual growth.

- **In 9th grade**, students take Acting I and Voice and Speech I, focusing on self in order to release and open emotional, vocal, and physical ranges. Dance I focuses on ballet and tap and a special project on musical theatre performance introduces students to working as an ensemble as they approach material written for the musical theatre.
- **In 10th grade**, students in Acting II/Playwriting focuses on scene study from modern American realism and students utilize their understanding of structure learned in Theatre History I (late 19th Century writers through contemporary theatre) to write their own plays. Dance II furthers students' skills in ballet and introduces Musical Theatre dance.
- **In 11th grade**, students are challenged in Acting III with more advanced work by approaching monologue and solo work in addition to classical texts which are studied in Theatre History II, including investigations into the work of Shakespeare and the Greeks. Dance III allows students to continue progress at their own individual abilities in ballet and Musical Theatre dance. Juniors additionally have their Junior Seminar/Business of Theatre project which focuses on preparing for their college search as well as the variety of arts-related careers they may want to pursue.
- **In 12th grade**, students work in Acting IV, an advanced scene study class, on the exploration of the text and utilization of technique to determine actor choices for the particular stylistic demands of a text and its period. Directing allows for a culmination of all the skills learned as students direct a fully staged and produced one-act play. Dance IV introduces modern dance to the skills already acquired from previous years and culminates in a group choreography presentation.

Every student is strongly encouraged to participate in theatre electives and projects each year (stage combat, stage makeup, costume design, stagecraft, stage management, screenwriting, and ballroom dance to name a few).

**What kind of student do you accept into the AVPA-Theatre Program?** The ideal candidate for AVPA/T will possess a combination of the following:

- Strong interest in pursuing an innovative academic experience alongside a deep interest in one or more of the theatre arts (acting, dance, musical theatre, playwriting, film, design, technical theatre)
- Self-discipline to maintain theatre studies and attend rehearsals after school while also keeping up with challenging academic coursework
- Eagerness to grow as a performing artist and willingness to accept constructive criticism with grace and enthusiasm
- Delight in the spirit of play and a strong passion for working with others to create a theatre family and ensemble rather than simply being the star in the spotlight

**What kind of student do you produce?** Theatre concentration students will be prepared to audition for college and conservatory Theatre Arts programs (BA and BFA). More importantly, AVPA theatre students, because of their course of study, will be ready for almost any college major or career path encountered in the 21st Century. AVPA theatre alumni work in the entertainment field, on Broadway and in TV, film, and other media, as well as other fields such as medicine, science, law, business and politics. Moreover, they have enhanced and developed imaginative capacity, flexible ways of thinking, self-discipline, sophisticated presentation techniques, and superior collaboration skills.





# AVPA

## ACADEMY FOR VISUAL AND PERFORMING ARTS

AVPA offers three areas of concentration: Music, Theatre Arts, and Visual Arts.



**What is the AVPA-Visual Program?** The AVPA visual arts concentration contains a mix of traditional and digital design and production, with a strong emphasis on digital. The program is designed for students interested in pursuing a college major in any one of a broad range of arts including graphic and web design, illustration, photography, film/animation/video, game design, package design, traditional/

fine arts, art history, and so much more. All of the courses help students develop creativity and critical thinking skills, tools to help them succeed in any major or career, including related fields like architecture, engineering, and computer science. Twice a year, students prepare an exhibition at the school to showcase their works, and over the course of each year, student works are entered in competitions with very good results.

- **9th graders** begin the program by developing and enhancing compositional design skills using both traditional and digital tools. Students become acclimated to the Adobe software suite using PhotoShop, InDesign, Illustrator, and Dreamweaver. They work on bringing their drawing skills to a more mature level. They also learn traditional and digital printing processes.
- **In 10th grade**, students study college-level video production and editing, virtual reality, 3D modeling, and web development. They learn how to use a laser engraver/cutter to produce art. Students also work with traditional media and learn printmaking with etching using a manual press, ink making, and bookbinding to produce different kinds of bound books.
- **In 11th grade**, students continue with more advanced topics in video production and editing, virtual reality, 3D modeling, and web development technologies using UX/UI concepts, CSS, and scripting. Students work with the VR software Tiltbrush and Blocks to create objects, and Unity for creating virtual 3D environments to incorporate with their objects. Students will be introduced to the business aspect of art and will research the requirements and costs of creating and selling works.
- **In 12th grade**, students work on capstone projects that incorporate skills acquired over the previous three years, focusing on portfolio development and studio projects using traditional media as well as the Adobe Suite and other software. Course content includes portfolio assessment, interview techniques, and presentation skills.

Starting in the 10th grade, students may take AP Art course electives and may earn college credit. Every AVPA-V student is strongly encouraged to participate in visual electives each year (interactive design, screen process, digital photography to name a few). For a more complete description of all of the courses, please visit <https://bcts.bergen.org/index.php/avpavisualcoursework>.

We offer a college preparatory, academic honors program, with a focus in visual arts. Please note that the AVPA-V program is not an atelier or a full-time visual arts program.

**What kind of student do you accept into the AVPA-Visual Program?** Academically talented students prepared for a college preparatory honors-level, academic curriculum. Accepted students are sometimes the strongest artists in their communities and participate in gallery/show events and/ or pre-college programs. Student we accept do not necessarily have the background but have the desire and motivation. We also look for:

- Individuals who have demonstrated academic achievement
- Students planning to study visual/industrial/design arts in college.
- “Visual is my life”
- Often times, students with years of private study continuing throughout high school.

**What kind of student do you produce?** College bound students prepared to succeed in college visual/industrial design, gaming, computer science, and engineering programs. Graduates have gone on to study music at The Cooper Union, The School of Visual Arts (SVA), Pratt Institute, Rhode Island School of Design, and Savannah College of Art and Design, to name a few. Many of our alumni are now successful 2D and 3D digital and traditional artists, designers, publishers, game developers, or avocational artists working in other fields.



# A DAY IN THE LIFE OF AN ACADEMY STUDENT

A typical school day starts at 8:00 a.m. with IGS (Informational Gathering Session). This is similar to homeroom. One big difference between the Academies and other schools is the length of the school day. School ends at 4:10 p.m., but if you choose to participate in a sport, the day may end even later.

BCA classes are divided into modules, commonly called “mods,” that are approximately 17 minutes long. Classes are typically between 2-3 mods. Each day’s schedule is different: Monday schedules are similar to Thursdays and Tuesdays are similar to Fridays. Wednesdays are unique. All students take a 6-mod class called Projects except seniors who have internships.

Each student has a certain amount of “free” mods. This is when they have no scheduled classes. They may choose to do their homework during their free mods or utilize the time to meet up with project partners or study with friends.

The last hour of the day is dedicated to electives, or on Wednesdays, clubs. Students may participate in a sport instead of taking an elective. Students may also stay in school late to work on a project with a group or use materials only available in the school. There is a late bus at 6:30 p.m.

MODS	Monday	Tuesday	Wednesday
	IGS	IGS	IGS
1-3	Intro Business Topics	Spanish II	Free Spanish II
4-6	Free	Free	Projects
7-9	Study Skills	Financial Literacy	
10-12	Lunch	Lunch	Lunch
13-15	Early America	Management Information Systems	Early America
16-18	Biology	Biology	Free
19-21	American Literature I	Gym/Health	American Literature I
22-24	Analysis I	Analysis I	Free
25-27	Electives or Free	Electives or Free	Clubs

## A SAMPLING OF ACADEMY ELECTIVES AND PROJECTS

For a complete listing of current electives, please visit our web site: <http://bcts.bergen.org>

Ad Agency	Propagation	Creative Puzzle Solving	Introduction to Volcanology
Adv. Musical Theatre	Teaching Pedagogy	Creative Writing	Latin Styles
Adventure of English	Theremin	Culinary Design	Marine Biology
Aerospace Engineering	Veganism	Design for 3D Printing	Marketing
American Cuisine	Voices	Design for Laser Cutting	Markets & Trading
Arduino Programming	Yearbook	Designing Escape Rooms	Math Problem Solving Seminar
Art & Politics	Creative Arts Workshop	Developmental Biology	MediBotics
Chem Olympics	Acting Methods	Digital Imaging	Model UN
Chinese History through Movies	Advanced Skills for AP Biology	Digital Photography	Modern Russian History I
Combinatorics and Geometry	Agricultural Research Methods	Earthquakes	MRL Xploration
Comedy Project	Arabic Culture	Einstein Relativity	Music & Society
Concert Band	Artificial Intelligence I	Fashion & Sewing	Non-Fiction Writing
Concert Choir	Astronomy	Foundations of Nanotechnology	One Act Plays
Criminology	Baking for the Holidays	Great Problems in Philosophy	Orchestra
Develop	Ballroom Dancing	Guitar Class	Organic Chem I
Digital Journalism	Beginning Ballroom	Immunology	Paper Art
Digital Recording Lab	Biochemistry	Interactive Design I/II/III	Philosophy of Human Experience
Entrepreneur BCA Mart	Bio-Engineering	Intermediate JAVA	Post-Soviet Russia and the Near Abroad
Entrepreneurial Science	Bioethics	Intro Architecture	Psychology of the Individual
Experimental Psych	Biopsychology	Intro to 3D Printing (S)	Res App in Mol Biol and Genetics
Exploring American Regional Cuisine	Chinese Calligraphy	Intro to JAVA	Research in Cell Biology
Exploring the Plant Kingdom	Civ Eng_Architecture	Intro to Journalism	Research in Cell Biology and
Family Sci Day	Civil Engineering	Intro to Laser Cutting (S)	Medical Science
Kitchen Chem	Classical French Cuisine	Intro to Linguistics	Screen Process
MAKE	Comic Book Publishing	Intro to Mandarin I, II, III	Screenwriting
Mini Medical School	Computer Security I	Intro to Microscopy	Selected Topics in Pharmacology
Modern Board Games	Concert Choir	Intro to Microscopy Advanced Skills for	Sequential Art
Physics Contests	Cooking for College	AP Biology/Strategies for AP Biology	Sports Medicine
Playwriting I	Costume Design	Intro to Python	Stagecraft
Sculpture - Masks	Creative Art Workshop	Intro to Video Production	Terrorism and 911
Shakespeare Project	Creative Nonfiction: Memoir, Personal	Intro to Web App Development	World Cuisine
Stage Combat/Stage Make Up	Essay, and the Not-Quite-But-Almost	Intro Video I/II/III	Writing for Science Competitions
Sustainability - Agriculture Plant	College Essay	Introduction to Robotics	Yoga





## CLUBS AND ACTIVITIES

Extracurricular activities at BCA are just as numerous, diverse, and exciting as our courses. Visit our website to see a complete listing of the clubs and activities offered to our students.

A sampling of extracurriculars includes...

**Cardio Training:** Incorporates speed training, techniques, and endurance. The goal of the club is to increase the speed, agility, power and strength of its members in a fun and stress free environment. Students are encouraged to join the “marathon crew” by completing a marathon, 26.2 miles, during club hours.

**Chess:** This club is open to chess players of all levels, from beginner on up. Members enjoy the friendly comradery of playing a game that challenges the intellect. In addition to playing games, there are opportunities to learn about some of the strategy of the game, such as the opening, the middle game, and the endgame. Some members end up joining the school chess team (the 2014 state champion and eighth in the nation).

**Junior Statesmen of America (JSA):** One of BCA’s largest student-run organizations, as well as one of the oldest high school debate societies in the country. JSA, through our regular Wednesday meetings, as well as our regional and national competitions, allow students to discuss and debate issues on a wide array of topics ranging from politics, economics, and other relevant societal issues. The club organizes various political awareness and activism campaigns such as mock elections, parent-student potlucks and viewing parties of important speeches and elections. The club annually organizes and hosts one of the largest student debate conferences in the region. Our organization has been recognized as the best chapter in the Mid-Atlantic Region and in the top chapters in the nation.

**LITMAG:** Student Literary Magazine of Bergen County Academies. It features original creative works by our students, including poetry, prose, and art. Participation by students from all of our academies is encouraged, and creative submissions from all artistic genres are welcomed. In the process of selecting works to include for publication, students learn valuable publishing skills, such as page layout, magazine design and copy editing.

**Musician’s Workshop:** Students in Musician’s Workshop build authentic musical instruments or electro-music devices. Steps include everything from cutting wood to soldering electronics. Projects may include building a guitar or ukulele, or learning to solder electronic devices such as a digital drum machine, mini amplifier or Theremin.

**Quiz Bowl:** The Quiz Bowl Club is an extension of the BCA Quiz Bowl Team, a fast-paced question-based competition where teams vie with one another to answer questions involving a wide-range of subjects including history, art, math, science, popular culture, etc. Participants meet each week to engage in practice meets, discuss strategy and refine their playing techniques. Students are encouraged to compete on the Quiz Bowl Team, but may choose to join the club for their own enjoyment.



# GLOBAL STUDIES AT BCA 2019

The Bergen County Academies Global Studies seeks to prepare students for success in a global economy and workforce; to provide students with an opportunity to interact with their peers in a global environment; to engender increased respect for values and traditions other than one's own; and to give students real-world exposure to, and experience with, students from another part of the world. The following is a sampling of last year's projects of the BCA Global Studies.



**London:** In March 2019 students who were enrolled in the International Baccalaureate (IB) Diploma Program were for the fifth consecutive year offered an international educational experience. London was chosen as the inaugural destination for this program in 2014 for its global prominence in business and economics and we returned to London for the third time this year. Once again the program was designed from the ground up around four themes—Business and Economics, CAS (Creative, Active, Service), Global Education, and Cultural Experiences. Students visited businesses such as Vodafone and the London Metal Exchange, participated in a student exchange program with Bexley Grammar IB School, visited Oxford University and toured UK Parliament among many other notable experiences.

**Dubai:** Our first Global Studies trip to an Arab Nation was completed in April 2019 as BCA became one of the first high schools from the USA to visit the United Arab Emirates (UAE). The program started in Abu Dhabi where students attended a presentation at NYU Abu Dhabi and visited the Sheikh Zayed Grand Mosque and brand-new Louvre Abu Dhabi. In Dubai students attended a presentation with Nakheel (developer of man-made islands such as The Palm Jumeirah), visited a local high school, toured the old souks as well as ascended to the top of the tallest building in the world.

**Italy:** Our Art History students traveled to Florence and Rome for a week of exploring the most iconic museums and cultural sights of central Italy with their Art History teachers. In Florence students toured the Uffizi Galleries, Palazzo Vecchio, Piazza della Signoria, and Piazzale Michelangelo among others. In Rome students visited the Pantheon, San Luigi dei Francesi, The Colosseum, Roman Forum/Basilica of Maxentius, Trevi Fountain, Spanish Steps and Vatican City. Enjoying pizza, pasta, and gelato were also frequent occurrences as they soaked up the culture of this amazing country.

## **Student testimonial –**

*Had you asked me 4 months ago whether I thought I would be able to go to Israel with school I would have laughed. Little did I know that you would present me with the amazing, life-changing opportunity to experience Israel as a global ambassador representing Bergen County Academies. And I truly thank you for making this far-fetched illusion a fantastic reality that enlightened the lives of numerous people, myself included. Nowhere else presents students with the opportunity to learn about technology and culture of other nations through first-hand experiences. Thank you again!*

*Yours Truly,  
JL, AAST 2019*



# RESEARCH 2019-2020

The unique Research program at BCA, open to students from all academies, gives our aspiring students the opportunity to develop a research project based on their personal interests. Students at other high schools may have the opportunity to do research internships at cooperating professional labs, only students at our school have access to the latest scientific equipment to pursue their research interests internally, adjusted to their individual schedules.



**Stem Cell Research Laboratory:** This laboratory is extremely well equipped. There is an array of state-of-the-art instrumentation available to students who complete the prerequisite course “Research Applications in Molecular Biology and Genetics”. Students are encouraged to develop research projects based on their own interests, to develop the habit of picking important scientific questions to answer.

Our research education program has been improved by the access to and collaboration with the surgical lab at Englewood Hospital and Medical Center (EHMC), a prestigious teaching hospital affiliated with the Mount Sinai Medical College in NYC. Selected research students who participate in the surgical training course learn live animal surgical techniques, and many have begun to use animals in their research, expanding the range of scientific questions that can be addressed. Our access to this and other prestigious medical centers in the NY-NJ area, encompassing doctors and scientists with a large and varied repertoire of cutting edge medical and educational techniques allows us to offer something of value to our colleagues and collaborators around the world. A critical question we attempt to answer in the Stem Cell Lab is “What can I do if I develop an idea or make a discovery that has the potential to become a product?” Students in this program have created a virtual biotech/pharmaceutical company and they get to interact with professional scientists, engineers, and government officials at a professional biotech incubator in North Brunswick, NJ. This ability has given our students access to instrumentation and collaborations that have resulted in patent applications and the creation of new businesses.

**Laboratory of Cell Biology:** The students carrying out research in the Laboratory of Cell Biology are engaged in some unique endeavors using the state-of-the-art equipment found on our campus. Students in the Cell Biology Lab originate and investigate their own

scientific questions that often focus on elucidating the biochemical and molecular underpinnings of various disease states using in vitro methods. In addition, students may also pose environmental questions, as well as questions related to developmental biology. Students in this lab have been awarded recognition from nearly every prestigious high school competition. During the 2019-2020 school year, the students included two Regeneron Science Talent Search Finalists and eight Regeneron Science Talent Search Semi-Finalists. One of these finalists took 5th place in the competition. Two students were awarded Regeneron International Science and Engineering Fair Finalists. The lab graduated a Davidson Fellow, winning the Top Prize. Students were selected to present their research at the national level of the Junior Science and Humanities Symposium and American Association for the Advancement of Science. The 2019-2020 school year saw three publications in peer reviewed journals indexed on PubMed. The Cell Bio Lab is also home to the BCA chapter of the Future Health Care Professionals (HOSA) and most admirably, because of their passion for STEM and their desire to “give back,” the students facilitate the Bergen SciChallenge Middle School Science Fair affiliated with the Broadcom Masters and the Society for Science and the Public.

**Agriscience:** This area of research utilizes the newly renovated environmental science center and greenhouse. Students from all Academies conduct research on the multifaceted discipline of agricultural science. Plants, animals, environmental resources, power and transportation, food science, and sustainability are areas for research within this broad discipline. Newly installed Coral Reef tanks allow for the additional area of marine science research.

All agriscience researchers become members of the student organization BCA Future Farmers of America and participate in competitive science fairs and national and international symposia at the culmination of their projects. In the short five years since its inception, BCA FFA students have won awards at both the NJ State and National FFA Agriscience Fair, the YSAP science fair, the Jersey Shore Junior Science Symposium, and our own BCA Research Expo (ISEF-affiliated).



# RESEARCH 2019-2020

## cont'd

**Chemistry/Nanotechnology:** Student researchers conduct hands-on lab experiments to synthesize, manipulate, analyze and visualize interesting nanoscale structures with the help of the state of the art equipment for interdisciplinary nanotechnology applications. Nanomaterials research projects may incorporate the utilization of Atomic force microscopy (AFM), Optical tensiometer, Rheometer, Optical Profiler, 4-point probes, Dynamic light scattering particle size analyzer/zeta potential analyzer, oxygen and water-free environment Glove Box, Fluorescent spectroscopy, Fourier transform infrared spectrophotometry (FTIR), Nuclear Magnetic Resonance (NMR) Spectroscopy and/or UV/Vis-NIR spectrophotometry.

Students submit grant proposals for external funding, i.e. Young Science Achievers Program and compete in various science competitions such as Regeneron Science Talent Search, Junior Science and Humanities Symposium and New Jersey Academy of Science Junior Fair. This year, one student presented a research poster at our sister school in Japan as well as qualified as a finalist in our BCA Research Expo. Another student is publishing a short abstract at the Journal of the Microscopy Society of America. A group of students competed in the Mid Atlantic Regional Meeting Chemagination competition to present North Jersey Chapter of American Chemical Society.

**Nano-Structural Imaging Lab:** The mission of NSIL Biological Research is to introduce students to scientific inquiry, through research and instrumentation, and to provide transferable, hands-on experiences with the techniques, practices and perspectives of professional scientists; with an emphasis on microscopy as an analytical technique, especially electron microscopy. Students are eligible to participate in this program after completing one of the pre-requisite courses. Next, the student will develop a novel research project based on their own interests and current scientific literature, in cell biology, molecular biology, structural biology, biomedical research, or related fields. They will then learn the tools and techniques to carry out experiments on a topic of their choosing, acquire and analyze data, and present their results in written and oral form. Students have participated in the BCA Research Expo, Young Science Achievers Program, and Regeneron Science Talent Search, as well as publishing their findings in professional journals. Additionally, these students are well suited for careers in bio-imaging, histology, pathology, and other clinical research options.

**Math Research:** This year, one of our students placed 3rd in Canada and is going to represent Canada in the International Math Olympiad. Two other students made it among the top 9 teams in the USA in an actuarial math research competition in Chicago.



*“Research at BCA was definitely one of the most fulfilling things that I did in my four years. It is one of the only times that something was entirely my own - a project created in my mind and conducted with my hands and written in my words. Being able to showcase that work at Regeneron Science Talent Search was the highlight of my high school experience.”*

*Anaiah Thomas  
Finalist at the 2020 Regeneron Science Talent Search*

**Research Optics:** Some of the Projects completed in our Optics Lab this year include:

- Measurement of thermal expansion coefficient using Laser interferometry
- Writing a LabView program to analyze the FFT output of the optogalvanic spectroscopy signal in a CO<sub>2</sub> enriched cell
- Simulation of Quantum Tunneling of Water in Beryl Crystal using Octave
- Set-up of the experimental system aimed at observing the double-slit effect and quantum entanglement with single photons
- Measurement of small-scale vibrations using Michelson interferometry
- Generating the standard operation procedures for Glucose sensing via mid-IR Spectroscopy

Submissions and competition entries include: AAPT Summer Conference, YSAP, Exploravision, AAPT Photo Contest and BCA Expo. A few students received the YSAP grant of \$500 each.



# THE ACADEMY RESEARCH MISSION

<http://research.bergen.org/>

Perspective

Purpose

Resources

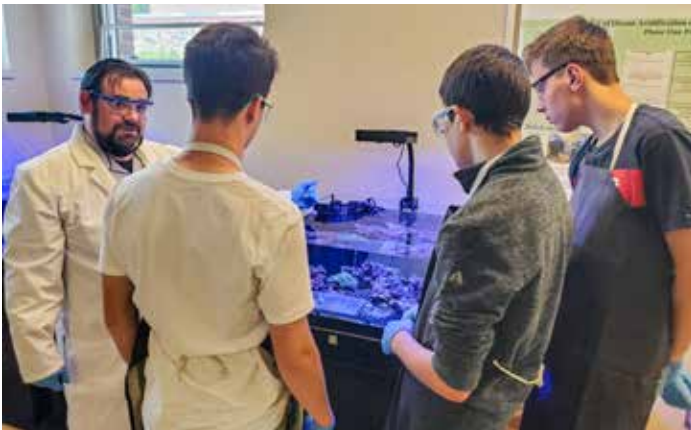
Collaboration

Analysis

Presentation

The mission of BCA Research is to expose students to scientific inquiry, research and instrumentation, and to provide transferable, first-hand experiences with the techniques, practices and perspectives of professional scientists. By expanding the capabilities and context of secondary science education, we believe that students will be better equipped for, and more likely to pursue leadership positions in science, scientific research and global-scale problem solving.

The foundations of the research program at BCA are deeply rooted in providing a real-world research environment for students to develop the independence, accountability, vision and drive to become outstanding members and future leaders within the science community. Our research program is based on six foundational principles, which work in concert with one another, to lay the groundwork necessary to nurture and challenge students to strive for excellence.



Perspective

Perspective can be thought of as the jumping off point between traditional classroom teaching and independent research.

Purpose

Students conducting independent research come to understand the purpose of their research. When developing the project and determining necessary experiments, students must understand the purpose of performing each experiment.

Resources

The tools needed to carry out experimentation make up a portion of the students' resources in a research project. Understanding how to use an instrument and obtain data, as well as determining the best tool to use for an experiment are important skills that a student develops in the experimentation stage of a project.

Analysis

Collaboration with other students is a necessary part of the independent research project. Students involved in research will collaborate in a peer to peer format, where students discuss topics, review others work, and provide feedback.

Collaboration

Proper analysis includes dissection and interpretation of the data, plotting data into easy to understand visual charts, determination of statistical significance, and differentiating nuances between correlation and causation.

Presentation

It is necessary for a student to share the findings in the same way that a professional would. Students must compile the findings of the study in the form of a written report, poster, oral presentation, or in some cases, a publication.

# PROJECTS

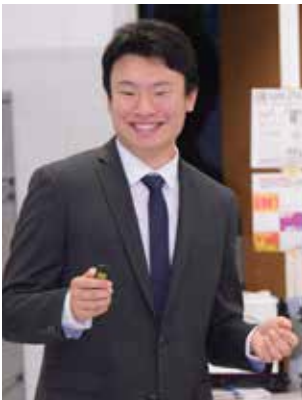
During their first three years at the Academies, students will spend two hours every Wednesday working on an interdisciplinary project. Students will have the opportunity to choose a different project each trimester. Some aspects of the projects are fairly consistent:

- Using the Internet to research a topic;
- Working in more than one discipline;
- Working as part of a team; and,
- Making a final presentation.

Students can choose among the available teacher-designed projects. See sampling of projects on page 11.



# SENIOR EXPERIENCE



The Academies focuses on developing students' readiness for the workplace. To help students prepare for their professional futures, the Academies requires that each student in the 12th grade complete an internship program called "Senior Experience."

### Overview

Senior Experience is a program in which students spend each Wednesday working in an internship at a company, office, laboratory, or other workplace. Each student identifies an area of interest and is placed accordingly to gain practical experience in their chosen field. A full-time faculty member coordinates and oversees the internships.

The essential component of a successful internship is the student's active participation in an area of interest under the guidance of a mentor. Different mentors approach this in different ways. Some mentors design a special project specifically designed for the student to develop his/her skills. Others bring the student into an ongoing project. The internship may be in any discipline or involve any profession; however, it is mandatory that the student be an active participant in activities related to the field of study.



To learn more about Senior Experience, and see a partial list of worksite placements, visit our web site: <http://bcts.bergen.org>.





# SCHOOL AND COLLEGE COUNSELING



Bergen County Academies is fortunate to attract students with a multitude of talents and interests. The School Counseling Department provides a safe, supportive and nurturing environment for students to learn and grow in an academically challenging institution. Our mission is to provide academic, social, career and emotional support at each grade

level in order for students to reach and surpass their individual potential. Partnering with teachers, administrators, parents, and community members, we provide the essential support that students require during their adolescent years.

Through a developmental school counseling program, our counselors work with students every step of the way throughout their high school career. The process begins first trimester of freshmen year with the seminar course “Freshmen Exploration for Social, Emotional and Academic Success.” Knowing it can be difficult adjusting to the high school culture, this course enables students to become comfortable with their school counselors as well as peers while also exploring typical adolescent issues. Counselors also meet individually with freshman to assess and provide guidance with their transition. By providing freshmen with the necessary academic, social and emotional skills for personal growth and development, students begin to understand their role in creating a positive school climate and making informed choices.

During sophomore year, students again work hand in hand with their school counselors individually and in “Sophomore Seminar,” a course which addresses important issues related to academic, career and college planning. At this time, counselors administer career inventories and discuss AP/IB course selection, the value of enrolling in meaningful summer programs and activities, standardized testing options, and methods of finding colleges that will be a “good fit.” This seminar is designed to reduce the stress and anxiety students often encounter as they move forward toward their postsecondary goals.

During sophomore and junior years, students have the opportunity to attend optional multi-day overnight college tours. Students visit college campuses where they attend information sessions with admissions staff and tour each school. By eating in college dining halls and attending evening activities, students acquire a first-hand feel for a school’s environment. These tours allow students to sample a wide variety of colleges in the company of their peers while under the supervision of their school counselors.

As students enter junior year, the School Counseling Department recognizes that the college selection process and career readiness become a major focus. Understanding its importance, counselors work with students to ensure a

smooth, confident approach for this sometimes daunting task. Junior Seminar not only provides students with college planning support but with the career tools and training (resume writing, cover letters and interview skills) essential for Senior Internship. Junior College Night is held every year in the winter of junior year for parents and students to understand the entirety of the college process. Immediately after this important night, counselors conduct college planning conferences with students and their families to demystify the college process, suggest appropriate collegiate prospects, and guide students through testing and application procedures. Each year, the School Counseling Department hosts numerous college visits, professional speakers, financial aid nights, and our annual spring college expo, which attracts approximately 100 prestigious college and universities.

As junior year comes to an end, students are invited to attend our annual College Exploration Experience (CEE), a three day, two-night program that serves as an intensive look at the college admission process. Students will attend seminars on topics such as How Colleges Select Students, How to Write Your College Essay, and The College Interview. They will be given a mentor who will meet with them in a small group or individual setting to answer questions, refine their essays, and help create a custom list of colleges to consider. Our mentors are both college admissions officers and experienced independent school counselors. They represent selective colleges and universities as well as some of the most prestigious independent schools in the country. While this program is not required, it is highly recommended by our School Counseling Department and previous attendees.

Fall of senior year is an especially busy time in the school counseling office. Counselors assist students with applications, essay critiques and college lists. Although applying to college can be a stressful time in a student’s and family’s life, counselors provide ongoing support and resources to navigate through these challenging times.

Throughout high school, our students utilize Naviance, an online career and college portal. This excellent tool allows students, parents and counselors to communicate about the college process, research what majors are offered at different colleges and maintain a working list of college prospects. With Naviance, the college process becomes far less daunting and students are able to truly assess which colleges are best for their personal goals and abilities. Parents are able to access Naviance as well, so that they can be fully involved and active in the college process.

Although a student’s needs vary at each grade level, our commitment to each student’s success remains the same. From encouraging students to reach out when they need a helping hand or supporting them through tough times, the School Counseling Department is committed to helping students reach and surpass their academic, social, and emotional potential.

# SPORTS

Students at the Academies play on sports teams with students from Bergen County Technical Schools' Teterboro and Paramus campuses. Bergen Tech Athletics compete in the Big North conference and the NJTAC. Our teams compete at the varsity, junior varsity, and freshman levels.



The athletic program is an integral part of the total educational process at Bergen County Technical High School District. Young people learn a great deal through their participation in interscholastic athletics. Determination, perseverance, sportsmanship, communication, and teamwork are some of the valuable attributes that can be attained through athletic participation. Athletics plays an important role in helping the individual student develop a positive self-concept as well as a healthy body. Athletic competition fosters school spirit and develops pride in the school and community for participants, students and spectators. Student-Athletes will leave our athletic programs with the readiness to be active participants in today's global community.

Through athletics we seek to provide a wholesome form of physical activity for as many students as possible. We will make every effort to offer our student-athletes the best in equipment, facilities, and coaching, in order to provide them with an enjoyable and rewarding athletic experience. While the reputation of our school and community is enhanced whenever its representatives excel, by far the greatest rewards and satisfactions are derived by the number of students who actually participate on our athletic teams.

We believe that the soul of our school can be reflected in what occurs before and after the normal academic day. This extension of the school day, whether it be in athletics, in the arts, or in clubs will set the tone for the school year. If we can keep students involved and concerned beyond the classroom, we are bound to have a more positive effect on them in the classroom. We are aware of the tremendous obligations we have as coaches and administrators to the student-athletes in our care. Parents entrust their children to us and we shall always strive to strengthen that bond.

Students at the Academies play on sports teams with students from Bergen County Technical Schools' Teterboro, Paramus and Applied Tech campuses. Bergen Tech Athletics compete in the Big North Conference and the NJTAC. Our teams compete at the varsity, junior varsity, and freshman levels.

## SPORTS OFFERED

### FALL

Football—Varsity, Sub-Varsity  
Boys/Girls Soccer—Varsity, Junior Varsity, and Freshman  
Boys/Girls Cross Country  
Girls Tennis—Varsity and Junior Varsity  
Girls Volleyball—Varsity, Junior Varsity, and Freshman  
Cheerleading

### WINTER

Boys Basketball—Varsity, Junior Varsity, and Freshman  
Girls Basketball—Varsity and Junior Varsity  
Boys/Girls Bowling  
Boys/Girls Fencing  
Boys/Girls Indoor Track  
Competitive Cheerleading

### SPRING

Baseball—Varsity, Junior Varsity, and Freshman  
Softball—Varsity, Junior Varsity, and Freshman  
Boys/Girls Golf  
Boys/Girls Lacrosse—Varsity and Junior Varsity  
Boys Tennis—Varsity and Junior Varsity  
Boys/Girls Track  
Boys Volleyball—Varsity and Junior Varsity

## 2019-2020 ACCOLADES

**Fall:** Boys Soccer – N.J.T.A.C. Vo-Tech Champions  
Girls Tennis - Liberty Division Champions

**Winter:** Boys Bowling – B.C.C.A. Champions  
Girls Bowling – Sectional Champions



# YOUR GUIDE TO APPLYING

Go to  
[studentadmissions.bergen.org](http://studentadmissions.bergen.org)

## Phase 1:

- **Register online with user name, password, and state student ID (SID/ NJ Smart ID)**
- **Submit Online Application (Deadline Monday, December 14, 2020)**
- **Give Recommendation Forms to three teachers and School Transcript Form to Guidance Counselor or School Official**
- **Take entrance test online**

Late February:

All applicants receive decision letters indicating if they will or will not continue to Phase 2.

## Phase 2: Interview

Mid April:

Students who interview receive YES or NO letters

## Phase 3:

- **Submit Declaration of Intent**
- **Take placement test for Math and World Language**

Above is the Admissions process chart showing the 3 phases of our application

In late February (the end of Phase 1), all applicants to the Bergen County Academies are notified of their application status by regular mail. All applicants receive decision letters indicating if they will or will not continue to Phase 2.

Interview invitations are mailed to students who will be continuing on to Phase 2. Only students who we interview will receive YES or NO letters in mid-April.

Information pertaining to a student's admission status is never released over the phone or by e-mail.

# THE APPLICATION

To begin our application process, you must first register online with a user name, password, and state student ID (SID/NJ Smart ID\*). Open House user name and password do not carry over to the application site.

Students must create a user name and password in order to apply. Go to [studentadmissions.bergen.org](http://studentadmissions.bergen.org)

The screenshot shows a login and register form. The 'Login' section includes a 'User Name' field, a 'Password' field, a checkbox for 'Remember me next time', and a 'Log In' button. The 'Register' section includes the text 'If you have not previously registered, click' and a 'Register' button. Both buttons are highlighted with a yellow border.

Your **user name** and **password** will allow you to gain access to the application website. **You must provide an e-mail address that you check daily.** During the admissions process, you will be contacted through this e-mail if we should have any information or questions for you.

Once you register, you may login with your user name and password, which you previously set up.

Our online application has 9 steps. All steps must be completed by the deadline of **Monday, December 14, 2020** in order for the application to be valid.

After you register, click on “Apply Now” to begin the process.

\*All students attending a public school in New Jersey have a SID/NJ Smart ID. Please ask your guidance counselor for this. Applicants who attend a private school, or a school that is not in New Jersey, should refer to the User Manual for instructions on how to proceed.

This online checklist covers the steps involved in completing your application. After each step is completed, the “X” will change to a check mark. You may make changes by clicking the “Edit” box. **Before you start the application, print and read the User Manual.**

**Step 1:** Start application. Enter personal information.

**Step 2:** Select Campus(es). This allows you to apply to Bergen County Academies, Hackensack and/or Bergen County Technical High School, Teterboro. You may have a first and second choice for both schools. Most students are accepted into their first choice.

The entrance test is MANDATORY in order for a student’s completed application to be considered.

Students who applied to Bergen County Academies and/or Bergen County Technical High School, Teterboro will take their admissions test online January 9th or 10th, 2021. Details will be emailed to the applicant after the application deadline.

**Step 3:** You **must** write a separate essay for **each** school you are applying to.

**Essay for Bergen County Academies, Hackensack:** In 400 words or less, tell us about yourself and why you would like to join your choices of academies.

If you have any activities, and/or have received any accolades and would like to share this with the Committee, please do so in 100 words or less within the same box.

**Essay for Bergen County Technical High School, Teterboro:** In 400 words or less, tell us why you would like to join your choice of program(s).

**Step 4:** Enter Reference Names. Provide us the names and email addresses of your teachers who will be writing your Math, English and Science recommendations. The English and Science teachers should have taught you in grades 7 or 8. The Math teacher should be teaching you currently in grade 8.

Only **one** set of Recommendation Forms is needed even if you are applying to both campuses. **Please do not contact us to inquire if we have received your school transcripts and recommendations; we will contact your school directly if any information is needed.**

**Step 5:** Preview your application. Look over your application and make sure you have completed all steps to your satisfaction.

**Step 6:** Submit. When you have submitted your application, you will be e-mailed a six-digit validation number and message automatically.

**Step 7:** Open for Edit. If, after you submit your application, you would like to edit some steps, you may do so at this step. **Make sure to save your revisions by going back to Step 7.** You **MUST** resubmit every time you open for edit otherwise your validation number will NOT be valid.

**Step 8:** Print your Transcript, Recommendation forms, and your Case Manager Form (if applicable). You must give all forms to your counselor and teachers by the December 14 application deadline.







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*A special thanks to the students and faculty of the Investigative Journalism and Yearbook projects for their contributions to this booklet.*