# Applied Technology High School

Engineering Technology
Health Professions
Cybersecurity



A Bergen County Technical School/ Bergen Community College
Career & Technical Education
High School Program

2025-2026

**Program Descriptions & Admissions Information** 

Applied Technology High School, located on the Paramus Campus of Bergen Community College, provides students a unique educational experience through a blend of academic high school concentrations—Engineering Technology, Health Professions, and Cybersecurity.

#### Our Unique Program offers students:

- •Underclassmen take college classes exclusively with other ATHS students. Courses for upperclassmen may include other college students from Bergen Community College. By taking college classes, students can earn a minimum of 30 college credits that are transferable to all four-year public colleges and universities in New Jersey. Many students will obtain a sufficient number of credits to earn an Associates Degree.
- •Technical classes are taught in labs within ATHS as well as labs at Bergen Community College. Health Professions students take classes at the Health Professions Integrated Teaching Center. Students in Engineering Technology take classes in the college's Technology Center.
- •Participation in the Senior Experience Internship program during students' senior year. This program is a graded internship graduation requirement. Student interns report directly to their internship one day per week during the academic year for the full business day.
- •Access to the full range of sports offered by Bergen County Technical Schools. Bus transportation is provided for students to participate in sports.

# Profile of an Applied Tech Student

- •Students who exhibit strong interpersonal skills, a commitment to excellence, a desire to become part of a unique high-school-within-a-college, and the potential to become active contributors to our dynamic learning community.
- •A motivated student who demonstrates the maturity and independence required to challenge themselves through academic and career focused dual enrollment classes with minimal parental supervision.
- •A student on or close to grade level with proficient scores on on state administered assessments who demonstrates the desire to challenge her/himself through academic and career-focused dual enrollment classes.

#### If you are interested in attending Applied Technology High School @ Bergen Community College:

- •Watch our virtual open house video, or learn about our programs by reading the materials posted on our website. Speak to your parent(s)/guardian(s) about the school and your personal high school goals.
- •Make your decision. It is your education. Do you think Applied Technology High School is right for you? Review the information on our website with your parent(s)/guardian(s) to help you make an informed decision.
- •Meet all application deadlines and requirements. Follow all instructions on our admissions website. Be sure to provide a personal email address, not your current school email address. We do not accept late applications.

Questions? Email us at ATHSadmissions@bergen.org







# Cybersecurity



The ATHS Cybersecurity program aims to scaffold all students from beginner to expert in the cybersecurity field. Students will be introduced to concepts such as cybersecurity vocabulary, hardware and networking basics, Windows and Linux command-line administration, Python programming to code and break ciphers, with the goal of going into future college classes with a strong background and essential skills they will need to succeed. Cybersecurity students have the opportunity to earn industry-recognized certifications prior to their senior year. Dualenrollment coursework allows students to earn advanced standing into several technical Associates programs at Bergen Community College, including the opportunity to earn an A.A.S in Cybersecurity. Students completing their Associate's Degree at BCC may transfer their credits to all four-year public college and universities in New Jersey.

# Scope and Sequence

Course titles in purple represent dual enrollment classes where students earn both high school and college credits

#### 9th Grade

#### CTE Course -

Intro to Cybersecurity

Science – Biology (Bio-103)

Math -Algebra I

Social Studies -U.S. History I

Language Arts - English I

World Language —Spanish I (LAN 113)

#### Health & PE -

- •DynamicsofHealth (WEX 101)/PE
- Body Conditioning (WEX 112)

#### 11th Grade

#### CTE Courses -

- •Introto Python (INF 103)
- Network Security (INF 267)
- Applied Cryptology

Science — Physics

Math —AlgebraII

**Social Studies** —WorldHistory

Language Arts Visual & - EnglishIII

Performing Arts —

World Music (MUS 106)

#### Health & PE -

- Yoga (WEX 170)
- Weight Training (WEX 116)

\*Math and ELA courses are contingent upon placement test results. HS-level courses may be taken as an equivalent. Additional 12th-grade BCC electives are available. Courses in Itaics are not required for graduation.

#### 10th Grade

#### **CTE Courses -**

- •Intro to Networking (INF 160)
- •PC Maintenance (INF 108)
- •Intro to LINUX (INF 165)

Science — Chemistry (CHM 100)

**Math** —Geometry

**Social Studies** — U.S. History II

Language Arts - English II

World Language —Spanish II (LAN 230)

**Health & PE** – CPR/First Aid (WEX 159)/Self-Defense (WEX 167)

#### 12th Grade

#### CTE Courses -

- •Ethical Hacking (INF 271)
- •Digital Forensics (INF-270)

#### Science -

• Gen Chemistry 1 (CHM 140-141)/ Physics 1 (PHY 280)

#### Math\* -

Pre-Calculus (MAT 160)/Statistics (MAT 150) \*\*

#### Social Studies -

Macroeconomics (ECO 101)

#### Language Arts -

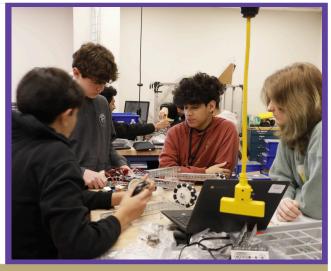
•EnglishComp I (ENG 101)/English Comp II (ENG 202)

#### Health & PE -

- •Contemporary Health Issues (WEX 185)
- •Core Stability (WEX 117)/ Aquacise (WEX 104)

# **Engineering Technology**

The Engineering Technology program provides students a unique educational experience through a blend of academic high school curriculum, college classes, and hands-on technical training. Students are given the opportunity to apply math, science, and technology to hands-on projects in the fields of automation, electronics, and advanced manufacturing to pursue a career in the diverse and multifaceted engineering technology field.



# Scope and Sequence

Course titles in purple represent dual enrollment classes where students earn both high school and college credits

#### 9th Grade

CTE Courses -

- Engineering Design
- Engineering Workshop

Science —Physics

Math -Algebra I

Social Studies -U.S. History I

Language Arts - English I

World Language —Mandarin I (LAN 116)

Health & PE -

- •Dynamics of Health (WEX 101)/PE
- Body Conditioning (WEX 112)

#### 11th Grade

#### CTE Courses -

- Smart Machines
- •Intro to Python (INF 103)
- •Machine Tool Principles I (MFG 122)

Science - Biology (BIO 101)

Math - Algebra II

Social Studies — World History

Language Arts — EnglishII

Visual & Performing Arts —

•World Music (MUS106)

Health & PE-

- •Yoga (WEX 170)
- Weight Training(WEX 116)

#### 10th Grade

CTE Courses -

- Intro to Mechatronics
- •CAD I (DFT210)

Science - Chemistry (CHM 100)

Math – Geometry

Social Studies - U.S. History II

Language Arts —English II

World Language —Mandarin II (LAN 276)

Health & PE-

- •CPR/FirstAid (WEX 159)
- •Self-Defense (WEX 167)

#### 12th Grade

#### CTE Courses -

- •ConceptsofIndustrial Design (MFG 206)
- •Fundamentals of Programming (CIS 165)

#### Math\* -

•Pre-Calculus (MAT 180)/Calculus

#### Social Studies-

•Macroeconomics (ECO 101) or Microeconomics (ECO 102)

#### Language Arts -

•EnglishComp I (WRT 101)/Eng Comp II(WRT 201)

#### Health & PE -

- •Contemporary Health Issues (WEX 185)
- •Core Stability (WEX 117))

<sup>\*</sup>Math and ELA courses are contingent upon placement test results. HS-level courses may be taken as an equivalent. Additional 12th-grade BCC electives are available. Courses in Itaics are not required for graduation.



# **Health Professions**

The mission of the Health Professions Program at ATHS is to provide preparation for multiple health careers through a core curriculum that emphasizes science, the human and organizational side of health care, and the opportunity to earn college credit and clinical experience. The goal of the program is to promote the concept of teamwork as essential to patient well-being, provide students a strong foundation in science, and address New Jersey's healthcare work force needs.

Students learn both through didactic training and hands-on clinical simulations in the classroom. The simulations are

Students learn both through didactic training and hands-on clinical simulations in the classroom. The simulations are reinforced by attending BCC's Center for Simulation approximately once a week, depending on the body system being studied.

# Scope and Sequence

Course titles in purple represent dual enrollment classes where students earn both high school and college credits

#### 9th Grade

#### CTE Courses -

- Medical Explorations
- •HealthcareSimulations I

Science -Biology(BIO 101)

Math -Algebra I

Social Studies -U.S. History I

Language Arts —English I

World Language — Spanish I (LAN 113)

#### Health & PE-

- •DynamicsofHealth (WEX 101)/PE
- •Body Conditioning (WEX 112)

#### 11th Grade

#### CTE Courses-

- Anatomy & Physiology I (BIO 109)
- Healthcare Policy
- •Diversity in Healthcare

Science - Physics

Math -Algebra II

Social Studies -WorldHistory

Language Arts -EnglishIII

Visual & Performing Arts—

• World Music (MUS 106)

#### Health & PE -

- •Yoga (WEX 170)
- Weight Training(WEX 116)

#### \*Math and ELA courses are contingent upon placement test results. HS-level courses may be taken as an equivalent. Additional 12th-grade BCC electives are available. Courses in Itaics are not required for graduation.

#### 10th Grade

#### CTE Courses -

- MedicalTerminology (MOA 140)
- •HealthcareSimulations II

Science — Chemistry (CHM 100)

Math-Geometry

Social Studies –U.S. History II

Language Arts -English II

World Language — Spanish II (LAN 230)

Health & PE-

- •CPR/FirstAid (WEX 159)
- •Self-Defense (WEX 167)

#### 12th Grade

#### CTE Courses-

- Anatomy& Physiology II (BIO 209)
- •Healthcare, Ethics, & Law (HSC 102)/Healthcare Sims III

#### Math\* -

•StatisticsI(MAT 150)/Pre-Calculus (MAT 180)

#### Social Studies -

- •Macroeconomics (ECO 101) or
- Microeconomics (ECO 102)

#### Language Arts -

•EnglishComp I (WRT 101)/Eng Comp II(WRT 201)

World Language —Speech Communication (COM 100)

#### Health & PE -

- •Contemporary Health Issues (WEX 185)
- •Core Stability (WEX 117) or Aquacise (WEX 104)

# School Counseling

A successful experience in high school is crucial to a solid foundation for future success. ATHS is proud to offer students a comprehensive school counseling program in Naviance, the web-based college readiness platform used throughout our school district. This program enables us to meet the development of the social, emotional, psychological, and educational aspects of each student.

Students and parents are provided with access to Naviance/Family Connection early in freshman year. Utilization of Naviance/Family Connection, provides students the ability to complete their respective Naviance programs and be adequately prepared for college and beyond.

#### School Counseling through Naviance/Family Connection:

- •Transition Survey •Game Plan Survey •Career Cluster Finder •Study Skills Survey •Learning Style Inventory • Enrichment Program Search • Career Interest Profiler •Student Profile •Intake Conference Worksheet •Take PLAN, PSAT, SAT, SAT Subject Tests, ACT • SuperMatch College Search
- •Completion of FAFSA •Scholarship Search
- Common Application Graduation Survey

# Senior Experience

The Senior Experience internship is an interactive learning partnership through which students increase their knowledge and skills in a particular area of study while under the guidance of a mentor(s). Students report to their internships one day per week during their senior year.

#### Senior Experience Internships for SY2025-2026 include:

ABC Television - Good Morning America

AZCO Corp

Achieving New Heights

Advanced Dental

Advocare Panorama Pediatrics

Air Fleet Training Systems

Allstate Insurance Altherm, Inc Aphelion Orbitals Inc

**Applied Computer Technologies** 

Ascend Home Health – Home Health Visiting Nurses Novartis Pharmaceutical

Assemblyman Calabrese Assemblyman Robert Auth

Bergen County Board of Commissioners Office

Bergen County Courthouse

Bergen County Department of Health Services

Bergen County Public Safety Operations Center Bergen County Department of Planning and

Engineering

Bergen County Sheriff's Department Bergen County Sheriff's Office – IT Bureau Bergen County Superior Court in Hackensack

Bergen County Volunteer Organization

Bergen Culinary School Bergen MakerSpace

Bergen New Bridge Medical Center Bergen Volunteer Medical Initiative

Bergen Volunteers

Borough of Dumont, New Jersey

Boswell Engineering

Brescia & Migliaccio Women's Health Buehler Challenger & Science Center

**CNR Products** CarePoint Health Case Medical

Century Air Clara Maass Hospital Coldwell Banker

Copy Shop Digital Systems

County of Bergen Division of Weights and Measures Tekno Products Inc. Crestron Electronics

DOKA

ENT, Sinus, and Hearing Center - Daniel Samadi, The Rios Law Firm

M.D. PC

**Dattner Architects** Debra Simon Center for Integrative Medicine

**Dellicker Strategies** Design Display Group, INC

Dr. Spinelli D.O. **Durante Physical Therapy** 

**Edep Academy Evans Architects** FOOTDRX, LLP

Feldman Brothers Electrical Supply

Ferry Machine Corporation Flex Engineering Group LLC Flight Safety International Garden State Helicopters Glen Rock Pediatrics

Guzzo & Guzzo HM Cardiology, PA

Hackensack Meridian HUMC

Hackensack Meridian Health Palisades Medical

Hackensack Meridian Pascack Valley Medical Center Holy Name Medical Center

Holy Name Medical Partners Harmony Health

Hudson Premier Healthcare Partner

**Hudson River Care and Counseling** 

Hytorc IZ Medical

Integrated Pain Management

JAG-ONE Physical Therapy

Jade Mountain Acupuncture & Wellness Center

Jain Orthodontics

Jersey College School of Nursing Juniper Assisted Living in Paramus

Kreiner Dental

Law Office of Louis G. DeAngelis, LLC

Lifescan Diagnostics PC

Luxury Living by Michael Hern

Main Dental Associates, LLC Malaki Dental Group McLaren Engineering Group

Meadowlands Chamber of Commerce

Middle Village Pharmacy

NJ Superior Court

NJIT Dept of Mechanical & Industrial Engineering

New Jersey Heart and Vein

Northern Jersey Plastic Surgery Center, LLC

Northvale Cardiologist Overpeck Creek Animal Hospital Phillips Precision Metacraft Paramount Group Inc. Park Orthodontics

Play Learn Explore Academy Powerarm Performance Premier Oral Surgery Group PC

Premier Realty Group

Professional Physical Therapy

**RVN** Enterprises

Railroad Construction Company

Ramsey Subaru

Randazzo Dental Associates Realty One Group Sunrise Ridgefield Park Animal Hospital Ridgewood Water Company Riverside Medical Group

Roosevelt Hall / Keller Williams Valley Realty

Royal Master Grinders Ryerson Smiles

Savia Community Counseling, LLC Schmidt Surveying, LLC

St. Joseph's University Medical Center Stonefield Surgicore Syngent TNTMAX

Tech Depot of Saddle Brook

The Department of Senior Services The Law Office of Kate Houghton

The Valley Hospital Health System

TheraPhysical Therapro LLC Toyota of Hackensack Transcend Orthodontics

University Reproductive Associates

Urban Associates, LLC VaYU Shakti Versa Products

Veterinary Emergency Group

Westchester Medical Center: Bon Secours

#### Clubs/Activities

Clubs and activities are an important component of our learning environment. Students have the opportunity to participate in a variety of clubs that are held after school. They must submit signed consent forms to participate in club activities, and abide by attendance guidelines.

The following clubs are open to all ATHS students:

- Debate Club
- Drama Club
- Gaming Club
- GSA
- HOSA (Health Occupations Students of America)
- Mathletes
- Model UN
- Music Club
- Project Invent
- · Science Olympiad
- Student Council
- TSA (Technology Students Association)
- Women in STEM
- Yearbook



Debate Club



Young Women Leadership Conference 2025



Model UN

# **Project Invent**

Project Invent is a nationwide organization that supports high school students to invent technologies for social good. As a student on a Project Invent team, you spend a full year taking a human-centered approach to developing a technology solution to solve a need in your community.



Our Project Invent team has collaborated with varied community partners over the prior years. These include Bleshman Regional Day School, The Leary Fund to benefit firefighters, and The Hackensack RiverKeeper.

#### **Athletics**

#### Athletics at Bergen County Technical Schools

At Bergen County Technical Schools, athletics are more than just a game, they're an essential part of the high school experience. Through interscholastic sports, our student-athletes build lifelong skills such as perseverance, leadership, teamwork, and communication, all while staying active and healthy.

We believe that participating in athletics promotes a strong sense of self, encourages school spirit, and helps students form lasting connections with their peers and community. Whether on the field, court, mat, or track, our athletes develop pride in themselves and in representing Bergen Tech.

Our goal is to offer meaningful and inclusive athletic experiences to as many students as possible. With high-quality equipment, top-tier coaching, and access to facilities, we are dedicated to supporting our student-athletes every step of the way.

Athletics, and all extracurricular activities, extend the learning day and help shape the culture of our schools. These programs bring students together, create a sense of belonging, and foster a positive school climate across all campuses.

Our teams compete in the Big North Conference and NJTAC and we proudly uphold the standards of sportsmanship and integrity set by the NJSIAA and Big North Conference.

Bergen County Technical Schools is made up of five campuses: Bergen County Academies (BCA), Teterboro, Paramus, Applied Tech, and Career Innovations. No matter which campus they attend, all students have the chance to represent the Bergen Tech Knights. This shared identity builds unity and camaraderie across the district and creates a unique sense of pride that goes beyond individual campuses.

As coaches and administrators, we take seriously the trust families place in us. We are committed to ensuring that every student-athlete feels supported, challenged, and inspired, on and off the field.

### **Sports Offered**

#### Fall

- Football—Varsity, Sub-Varsity
- Boys/Girls Soccer—Varsity, Junior Varsity, and Freshman
- Boys/Girls Cross Country—Varsity
- Girls Tennis—Varsity and Junior Varsity
- Girls Volleyball—Varsity, Junior Varsity and Freshman
- Football 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 (tryouts held in the summer)

#### Spring

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

#### Accolades 2024-2025 School Year

- GIRLS GOLF -BIG NORTH WEST DIVISION CHAMPIONS
- GIRLS VOLLEYBALL BIG NORTH LIBERTY DIVISION CO-CHAMPIONS
- GIRLS SOCCER BIG NORTH LIBERTY DIVISION CHAMPIONS
- SOFTBALL BIG NORTH LIBERTY DIVISION -SPORTSMANSHIP AWARD
- COMPETITION CHEER NJ STATE CHAMPIONS
- GIRLS BOWLING BIG NORTH LIBERTY DIVISION CHAMPIONS
- BOYS BOWLING NORTH 2, GROUP 4 STATE SECTIONAL CHAMPIONS
- BOYS FENCING BPFL PATRIOT DIVISION CHAMPIONS
- GIRLS TENNIS BIG NORTH LIBERTY DIVISION CHAMPIONS
- BOYS TENNIS BIG NORTH LIBERTY DIVISION CHAMPIONS

## College Acceptances - Class of 2025

**Adelphi University** 

Albany College of Pharmacy & Health

**Sciences** 

**American University** 

**Baruch College - School of Public** 

**Affairs** 

Baylor University Bentley University

Bergen Community College Berklee College of Music Binghamton University

Boston College Boston University

**Cal Poly** 

Caldwell University
Case Western University
College of Charleston
Colorado School of Mines

**Drexel University** 

East Stroudsburg University of

Pennsylvania

**Embry Riddle Aeronautical University** 

- Daytona Beach

**Embry Riddle Aeronautical University** 

- Prescott

**Fairleigh Dickinson University** 

**Felician University** 

Florida Atlantic University

Florida Tech

Fordham University
Gettysburg College
High Point University
Hofstra University
Howard University

Illinois Institute of Technology

Iona University Iowa State University James Madison University

Kean University Lafayette College Lehigh University Liberty University

Loyola University Maryland Manhattan University

**Marist University** 

Mercy University

Michigan State University Monmouth University Montclair State University

**Moravian University** 

**New Jersey City University** 

New Jersey Institute of Technology New York Institute of Technology

Northeastern University

**Norwich University** 

Nova Southeastern University

**Oregon State University** 

**Pace University** 

Pennsylvania College of

**Technology** 

Pennsylvania State University Portland State University Providence College Quinnipiac University

Ramapo College of New Jersey

Regent University

Rensselaer Polytechnic Institute Rochester Institute of Technology

Rose-Hulman Institute of

**Technology** 

**Rowan University** 

**Rutgers University - New Brunswick** 

**Rutgers University - Newark** 

SUNY Buffalo State

SUNY College of Agriculture &

**Technology at Coblesill** 

SUNY College of Technology at

Canton

**SUNY Cortland** 

SUNY Polytechnic Institute SUNY at Purchase College Saint Joseph's University Saint Peter's University

San Francisco Conservatory of

Music

**Seton Hall University** 

Southern Methodist University St. John's University - New York St. Thomas Aquinas College Stevens Institute of Technology Stevenson University Stockton University Susquehanna University Syracuse University

**Temple University** 

The College of New Jersey

The George Washington University

The University of Tampa Thomas Jefferson University

**Union College** 

University of Alabama in Huntsville

**University of Arizona** 

University of California - Davis

University of Cincinnati University of Connecticut University of Delaware University of Florida University of Hartford University of Limerick

University of Massachusetts -

**Amherst** 

University of Massachusetts -

**Boston** 

University of Massachusetts -

Dartmouth

University of Massachusetts -

Lowell

University of Michigan - Ann Arbor

University of New Haven University of North Carolina at

**Chapel Hill** 

University of Pittsburgh
University of Portland
University of Rhode Island
University of Rochester
University of Scranton
Vanderbilt University

Villanova University
Virginia Commonwealth University

Virginia Tech

Wentworth Institute of Technology

Wheaton College Widener University

William Paterson University
Worcester Polytechnic Institute

## Frequently Asked Questions

#### What is the length of the school day and school year?

The school is in session from 7:40a.m. until 2:31p.m. for 180 days per year.

#### Is there any cost to the parents for sending students to Applied Tech?

Bergen Tech is a free public school of choice for residents of Bergen County.

#### Do parents arrange and pay for transportation?

Transportation to AppliedTech is arranged by the students' home district at no cost to the parents.

#### Can students transfer to this school after the ninth grade?

No. The program structure is such that students enter Applied Tech with a selected major and prescribed courses.

#### Are services provided to students with disabilities?

Yes. Services are provided according to the child's IEP or 504 Plan.

#### Is there an admissions test for the school?

An entrance exam is not required for consideration to Applied Technology High School. Qualified students who meet the admissions criteria are offered interviews. Students are required to take a placement test once they've been accepted.





The Bergen County Technical School District is an educational model that prepares students to work, live, and lead in a global community.

## BERGEN COUNTY TECHNICAL SCHOOLS BOARD OF EDUCATION

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