



# Academy for Allied Health Sciences

**Kevin Dougherty**  
Principal

**Jenna Mirabella**  
Teaching Supervisor

Middle States Association of Colleges and Secondary Schools Accredited  
2018 National Blue Ribbon School

**MISSION STATEMENT:** The Union County Academy for Allied Health Sciences is a four-year career academy dedicated to preparing students for careers in health sciences. We provide a rigorous curriculum to develop each student's knowledge and skills, which empowers them to be successful in both college, career, and life as global citizens. Our students achieve excellence in communication, teamwork, leadership, and compassionate healthcare.

Academy for Allied Health Sciences Career & Technical Education Course Sequence	
Grade 9	Dynamics of Health Care in Society*
Grade 10	Emergency & Clinical Care*, Community Health, Medical Terminology*
Grade 11	Anatomy & Physiology I*
Grade 12	Emergency Medical Technician <i>or</i> Introduction to Clinical Research* <b>and</b> AAHS Capstone
Career & Technical Education Electives	Anatomy/Physiology II*, Medical Ethics, Introduction to Clinical Research*, Physiology of Stress, Health Outcomes & Social Justice, Health Care Policy: Politics & Power, RFI Cancer Research, Scientific Principles of Nutrition*, Microbiology, Bioinformatics, Introduction to EKG Interpretation, Biochemistry for Health Sciences, AP Psychology, Senior Internship

\*Rutgers University School of Health Professions course

**CERTIFICATIONS:** OSHA General Industry Certificate, First Aid, Basic Life Support (American Heart Association), Emergency Medical Technician. Students will have the opportunity to take the National Registry Emergency Medical Technician certification examination by the end of their senior year.

**POST-SECONDARY PARTNERSHIPS:** AAHS works in conjunction with Rutgers University to provide students the opportunity to earn college credit through the Rutgers School of Health Professions. Additionally, AAHS has a partnership with Union College that provides students with an opportunity to receive national certification on the National Registry of Emergency Medical Technician-B examination.

**ADVISORY BOARD:** AAHS works in close partnership with health care professionals, representatives from colleges and universities, and community members to ensure that our career and technical education program is preparing students for the present and future needs of the Allied Health field. Our advisory board consists of health care professionals from a variety of specialties within the field, faculty from Union College, private medical practitioners in the fields of family and internal medicine and physical therapy, and students, faculty, and parents of AAHS.



# Academy for Global Logistics

Jasmin Lee  
Principal

**MISSION STATEMENT:** The Union County Academy for Global Logistics is a four-year career academy dedicated to preparing students for careers in global commerce with a focus on logistics and supply chain management. We provide a rigorous curriculum to develop each student's knowledge and skills, which empowers them to be successful in both college, career, and life as global citizens. Our students achieve excellence in communication, teamwork, systems thinking, management, and visionary leadership.

Academy for Global Logistics Career & Technical Education Course Sequence	
Grade 9	Introduction to Supply Chain Management*
Grade 10	Logistics and Technology*
Grade 11	Purchasing and Supply Chain Management*
Grade 12	Operations Management*
Career & Technical Education Electives	Organization and Management* Principles of Economics* Business Statistical Analysis*

\*Dual Credit Opportunity to earn up to 36 college credits toward Union College AS degree in Supply Chain Management.

**CERTIFICATIONS:** The Manufacturing Skill Standards Council Certified Logistics Associate certification provides students with a credential that certifies them in: Global supply chain logistics, Safety principles, logistics environment, material handling equipment, safe material handling and equipment operation, quality control principles, work communications, computer use for the Logistics industry, teamwork, and 5S methodology.

**POST-SECONDARY PARTNERSHIPS:** The Academy for Global Logistics works in conjunction with Union College and Rutgers University Supply Chain Management program to provide students the opportunity to earn college credit.

**ADVISORY BOARD:** The Academy for Global Logistics works in close partnership with industry professionals, representatives from colleges and universities, and community members to ensure that our career and technical education program is preparing students for the present and future needs in the global business economy of the future. Our advisory board consists of professionals from a variety of specialties within the field, faculty from Rutgers University and Union College, and students, faculty, and parents of the Academy for Global Logistics.



**ACADEMY FOR  
INFORMATION TECHNOLOGY**  
2021 AND 2013 NATIONAL BLUE RIBBON SCHOOL AWARDEE  
MIDDLE STATES ASSOCIATION OF COLLEGES AND SECONDARY SCHOOLS ACCREDITED



**Paul DeFrancesco**  
Principal

**Sue Anne Marcello**  
Teaching Supervisor

**MISSION STATEMENT:** The Academy for Information Technology is a small, four-year career academy that fosters critical thinking skills in its culturally diverse student population. By stressing intellectual curiosity, hard work, ethical behavior, and technological expertise with business integration, the school community guides its students to achieve their greatest potential. The AIT graduate is prepared academically, technologically, and interpersonally for the challenges of the future.

<b>Academy for Information Technology Career &amp; Technical Education Course Sequence</b>	
Grade 9	Computer Applications in Business
Grade 10	AP Computer Science Principles, Principles of Business, Principles of Finance
Grade 11	<i>Business Administration/Management Program</i> : AP Economics (Macro/Micro) <i>Computer Science Program</i> : AP Computer Science A
Grade 12	<i>Business Administration/Management Program</i> : Global Financial Markets, Business Intelligence and Analytics <i>Computer Science Program</i> : Advanced Software Development
CTE Electives	Accounting, Bioinformatics, Computer Art, Data Integrity, Database Programming & Development, Project Management, Senior Internship in Technology or Business

**CERTIFICATIONS OFFERED:**

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**AP CAPSTONE DIPLOMA PROGRAM:** Offered at AIT as an opportunity to apply career and technical education learning in a culminating high school experience, the AP Capstone Diploma is an indication that students are prepared as independent thinkers with skills that are valued and sought after by colleges and universities.

**AP<sup>®</sup> COMPUTER SCIENCE FEMALE DIVERSITY AWARD:** In 2022, AIT was one of only 64 schools who earned the College Board's **AP<sup>®</sup> Computer Science Female Diversity Award** for expanding young women's access to both **AP Computer Science A** and **AP Computer Science Principles**.

**PROFESSIONAL PARTNERSHIP:** The Academy for Information Technology enjoys a partnership with Novo Nordisk, a global healthcare company with a passion for and a commitment to information technology.

**FBLA:** All AIT students are members of Future Business Leaders of America (FBLA), the largest career student business organization in the world. AIT students continue to achieve success in FBLA's National Awards Program, achieving excellence in business and technology related areas.

**ADVISORY BOARD:** AIT's Advisory Boards connect us to university and industry leaders in both the information technology and business fields. Our Boards are further enhanced by the expertise and dedication of the numerous AIT faculty members who, after achieving great success in industry, have entered the classroom to help educate the next generation of business and information technology professionals.



# Academy for Performing Arts

**Kelly Douglas-Jackson**  
Principal

**Courtney Serpone**  
Teaching Supervisor

Middle States Association of Colleges and Secondary Schools Accredited  
2017 National Blue Ribbon School

**MISSION STATEMENT:** The Academy for Performing Arts is an innovative four-year high school, immersing students in honors' level academics while training in a pre-professional artistic setting with majors such as theatre, dance, or technical theatre. The Academy fosters the discipline, integrity and passion necessary for students to succeed at the post-secondary level and as members of the performing arts community. The culmination of the program allows students to complete their senior year by taking college-level courses and receiving college credit at Kean University.

Academy for Performing Arts Career & Technical Education Course Sequence	
Grade 9	Dance I, Theatre I, Technical Theatre I
Grade 10	Dance II, Theatre II, Technical Theatre II
Grade 11	Dance III, Theatre III, Technical Theatre III
Grade 12	<i>Dance Majors:</i> Technique & Theory of Ballet*, Technique & Theory of Modern*, Technique & Theory of Jazz*, Dance Styles* <i>Theatre Majors:</i> Advanced Scene Study*, Performer's Presence*, Improvisation*, Plays: On the Page and On the Stage*, Dance in Musical Theatre* <i>Technical Theatre Majors:</i> Introduction to Performance Design*, Technical Theatre IIA*, Plays: On the Page and On the Stage*, Technical Theatre IIB*
CTE Electives	Dance Lab, Dance Lab for Non-Majors, Technical Theatre Lab, Technical Theatre Lab for Non Majors, Vocal Performance, Musical Theatre, Creative Writing, Music Technology

\*Kean University course

**ARTICULATION AGREEMENT WITH KEAN UNIVERSITY:** The Academy for Performing Arts, in conjunction with Kean University, provides its students the opportunity to earn college credit. Students spend their high school senior year at Kean University taking a full freshman college course load, which includes a concentration in their Performing Arts major. In addition, students are given the opportunity to select courses from Kean's highly selective NJ Center for Science, Technology, Engineering and Mathematics (STEM) curriculum. Credit and grades earned through this collaborative program appear on an official transcript from Kean University.

**ADVISORY BOARD:** The Academy for Performing Arts works in close conjunction with members of the performing arts community in order to help our students prepare for the challenging demands of a career in the arts. Our advisory board consists of members from Kean University, Rutgers University, George Street Playhouse, Carolyn Dorfman Dance Company, Playwright's Theatre, and APA parents, students, and faculty.



# Magnet High School for Science, Mathematics, and Technology

**Alice Mansfield-Smith**  
Principal

**Adam Moskowitz**  
Teaching Supervisor

Middle States Association of Colleges and Secondary Schools Accredited  
2004, 2013 National Blue Ribbon School

**MISSION STATEMENT:** The Union County Magnet High School for Science, Mathematics, and Technology prepares students of Union County to become self-directed, responsible, and productive individuals to succeed in our rapidly changing modern world. Our engineering-based specialized career academy emphasizes critical thinking, problem solving, and leadership skills through a rigorous project-based curriculum. Through the support and collaborative effort of stakeholders within the school community, Magnet High School offers students a diverse and forward-thinking learning experience that fosters a sense of creativity and ingenuity while remaining true to its core ethos of engineering. It is our goal to provide students with the most advanced career and technical education course of study in conjunction with rigorous academics needed to be both college and career ready. In pursuit of that goal, the Magnet High School community inspires students to be productive members of society, adept at offering ethical and dynamic solutions to continuously resolve human and societal challenges.

<b>Magnet High School Career &amp; Technical Education Course Sequence</b>	
Grade 9	Technology & Design
Grade 10	Introduction to Engineering & Digital Modeling
Grade 11	Introduction to Programming, Advanced Manufacturing & Project Management
Grade 12	Human Factors Engineering
Career & Technical Education Electives	Aerospace Engineering, Biochemistry, Architectural Design, Civil Engineering Design, Electrical Engineering Concepts, Engineering Design Capstone, Engineering Ethics, Environmental Engineering, Fundamentals of Biomedical Engineering, Introduction to Chemical Engineering, Robotics, Senior Internship

**CERTIFICATIONS:** Students become AutoCAD Certified Users by the end of their freshman year. During their sophomore year, they will become Fusion 360 Certified Users and have the opportunity to become Certified Associates in CAD for Mechanical Design. By the end of their junior year, students become OSHA 10 certified.

**MAKERSPACE:** A state-of-the-art makerspace is the focal point of our building. Students are able to work on open-ended projects through their classes, clubs, and personal interest. It includes equipment such as 3D printers, laser cutters, and a CNC mill and router.

**AP COURSE COLLEGE CREDIT:** Throughout their four years of high school, students have the opportunity to take a variety of AP courses from approximately twenty offerings on campus.

**ADVISORY BOARD:** As part of our focus on career and technical education, Magnet High School has an industry advisory board that assists our school in making programmatic decisions for our engineering and related curriculum. Members of our advisory board include local industry professionals with careers in a variety of engineering and engineering-related fields, representatives from a local college, parents, students, administrators, and teachers. This diverse and active group has given critical input which has had influence on the design and modification of our school's facilities and equipment, curriculum, career days, and certification credentials.



# Union County Vocational-Technical High School

**Jeffrey Lerner**  
Principal

**Robert McCurley**  
Teaching Supervisor

Middle States Association of Colleges and Secondary Schools Accredited  
2012 National Blue Ribbon School of Excellence

**MISSION STATEMENT:** The Union County Vocational-Technical High School is a four-year, full-time high school dedicated to advancing the learning and well-being of all students. UCTECH is committed to ensuring high standards and challenging opportunities to students through the integration of academic and technical training. We also strive to develop self-awareness, confidence, character, sensitivity to the environment, and leadership skills. Academic and technical disciplines are fully integrated; students will be consistently called upon to challenge their levels of learning through assignments and projects requiring application of knowledge across all disciplines.

**ADVISORY BOARD:** The career academies at UCTECH have established a strong working relationship with representatives from colleges and universities, industry professionals, and the UCTECH community. These partnerships have allowed our school to create innovative and structured educational opportunities that prepare our students for their respective futures. Our advisory board consists of professionals from Kean University, Montclair State University, Ramapo College of New Jersey, Rutgers University, and the United States Department of Energy.

**CAREER ACADEMIES:** Six innovative and exciting career academies are offered under the umbrella of UCTECH. Career Academies are distinguished by small cohorts of students, approximately 25 students per academy, that pursue career and technical education within a specific field of growing industry popularity.

**ACADEMY FOR CLINICAL CARE SCIENCES<sup>+</sup>**  
**ACADEMY FOR LAW & JUSTICE**  
**EXERCISE PHYSIOLOGY & RELATED SCIENCES<sup>+</sup>**

**SCHOOL OF DESIGN\***  
**SCHOOL OF SUSTAINABLE SCIENCES\***  
**TEACHER EDUCATION ACADEMY\***

**\*ARTICULATION AGREEMENT WITH KEAN UNIVERSITY:** UCTECH, in conjunction with Kean University, provides School of Design, School of Sustainable Sciences, and Teacher Education Academy students the opportunity to earn college credit. Students spend their high school senior year at Kean University taking a full freshman college course load. In addition to a concentration in their specific program, students are given the opportunity to select courses from Kean's highly selective NJ Center for Science, Technology, Engineering and Mathematics (STEM) curriculum. Credit and grades earned through this collaborative program appear on an official transcript from Kean University.

**+POST-SECONDARY PARTNERSHIP WITH RUTGERS UNIVERSITY:** UCTECH works in conjunction with Rutgers University to provide students in the Academy for Clinical Care Sciences and Exercise Physiology & Related Sciences the opportunity to earn college credit through the School of Health Related Professions.

**+POST-SECONDARY PARTNERSHIP WITH SYRACUSE UNIVERSITY:** UCTECH students enrolled in the Academy of Law & Justice have the potential to earn college credits through AP Government & Politics as well as through an articulation with Syracuse University.



## Academy for Clinical Care Sciences

**MISSION STATEMENT:** The Academy for Clinical Care Sciences will prepare students interested in pursuing a career in a direct patient care field, such as nursing. Students will be introduced to subject areas including anatomy and physiology, medical terminology, dynamics of health care, nutrition, and clinical care skills. The fundamental skill and talent of caring will be introduced to students through coursework and clinical setting observations. Professional problem solving will be learned through observing and assessing clinical scenarios.

Academy for Clinical Care Sciences Career & Technical Education Course Sequence	
Grade 9	Clinical Care I, Dynamics of Health Care in Society*
Grade 10	Medical Terminology*, Emergency & Clinical Care, Community Health
Grade 11	Anatomy and Physiology I*, Clinical Care II, Introduction to EKG Interpretation
Grade 12	Anatomy and Physiology II*, Role of Pharmacy Technician in Healthcare, Fundamentals of Health & Wellness*

\*Rutgers University School of Health Related Professions course

**CERTIFICATIONS:** Basic Life Support (American Heart Association), Pharmacy Technician Certification, OSHA 10, NHA Certified Clinical Medical Assistant



## Academy for Law & Justice

**MISSION STATEMENT:** Students enrolled in the Academy for Law & Justice are immersed in a four-year sequence of courses grounded in the criminal justice and legal fields. Students participate in authentic and rigorous learning experiences designed to explore social issues, human relations, law, and government while developing critical thinking and analytical skills. The Academy for Law & Justice prepares students for public service, both as professionals in law, government, and criminal justice, and as proactive, knowledgeable citizens. Students enrolled in the Academy of Law & Justice have the potential to earn college credits through AP Government & Politics as well as through an articulation with Syracuse University.

Academy for Law & Justice Career & Technical Education Course Sequence	
Grade 9	Introduction to Law and Justice
Grade 10	21 <sup>st</sup> Century Policing, Crime Scene Investigation, AP Government & Politics
Grade 11	Criminal Law & Procedure, Introduction to Analysis of Public Policy
Grade 12	Business Law, Juvenile Delinquency, Correctional Institutions
Career & Technical Education Electives	Introduction to Forensic Medicine, Genocide Studies and The Holocaust, Patent Law, Senior Internship, Intro to Analysis of Public Policy*

\*Syracuse University course

**CERTIFICATIONS:** CPR (Red Cross), First Aid, OSHA 10



## Exercise Physiology & Related Sciences

**MISSION STATEMENT:** The Exercise Physiology & Related Sciences Program (ExPRS) is a specialized program that provides students with an understanding of how the body functions, reacts, and responds to movement during physical exercise. ExPRS has been designed to prepare students for many opportunities in the growing fields of health and exercise, specifically in jobs related to physical therapy, occupational therapy, exercise science, athletic training, sports medicine, cardiac rehabilitation, and nutrition. ExPRS students obtain a solid foundation in the medical sciences while completing a rigorous curriculum, including the opportunity to earn college credits through Rutgers University.

Exercise Physiology and Related Sciences Career & Technical Education Course Sequence	
Grade 9	Foundations of Exercise Science
Grade 10	Medical Terminology*, Dynamics of Healthcare in Society*, Emergency & Clinical Care*
Grade 11	Anatomy & Physiology I*, Scientific Principles of Nutrition*, Introduction to EKG Interpretation & Principles of Cardiac Rehab, Introduction to Physical Therapy
Grade 12	Anatomy & Physiology II*, Exercise Prescription for Special Populations, Fundamental of Health & Wellness*
Career & Technical Education Electives	Medical Ethics, Medical Mathematics*, Introduction to Clinical Research, Microbiology, Senior Internship

\*Rutgers University School of Health Related Professions course

**CERTIFICATIONS:** Basic Life Support (American Heart Association), American College of Sports Medicine Personal Trainer, OSHA 10



## School of Design

**MISSION STATEMENT:** The School of Design provides students the unique educational opportunity to study interdisciplinary applications of design. Students are given access to the latest multimedia design hardware and software to learn to visually express ideas by merging creativity and technology. Students are introduced to subject areas including Adobe Creative Suite (Photoshop, Illustrator, InDesign), video and motion graphic production, digital photography, 3D animation and modeling, AutoDesk (CAD, Inventor, 3D Modeling and Revit), as well as technical drawing and design.

School of Design Career & Technical Education Course Sequence	
Grade 9	Introduction to Form, Introduction to Technique
Grade 10	Graphic Design, Industrial Design
Grade 11	AP Art History, Architectural Design
Grade 12	Kean University courses in Design and Architecture*

\*Kean University course

**CERTIFICATIONS:** AutoCAD Certified User, Adobe Certified Associate, OSHA 10





## School of Sustainable Sciences

**MISSION STATEMENT:** The School of Sustainable Sciences puts into practice project and problem-based learning, solving real world problems with sustainable solutions. Students, who spend their senior year at Kean University, take a series of math and science related courses that provide a foundation for them to pursue degrees and careers in sustainability. Students explore careers in sustainable design, energy, and technology. Curriculum topics include the economics of sustainability and applications of sustainable science in the 21<sup>st</sup> Century.

School of Sustainable Sciences Career & Technical Education Course Sequence	
Grade 9	Introduction to Environmental Sciences, Human Ecology
Grade 10	AP Environmental Sciences, Principle of Agricultural Sciences: Plant
Grade 11	AP Biology, Sustainable Innovations & Entrepreneurship, Sustainable Energy, Technology & Integration
Grade 12	Kean University Courses in Sustainability Studies*

\*Kean University Center for Sustainability Studies course

**CERTIFICATIONS:** CPR/AED (Red Cross), OSHA 10



## Teacher Education Academy

**MISSION STATEMENT:** The Teacher Education Academy (TEA) trains future educators in topics related to the history and future of education, professionalism and ethics, child/adolescent psychology and the art of teaching. TEA students, who spend their senior year at Kean University, have the opportunity to assess themselves as learners and maintain a portfolio that reflects what they have learned and discovered about the teaching profession and themselves as learners and future educators. Students have the opportunity to intern, learn about the diversity of teaching, and discover more about the roles and responsibilities of a school and its staff.

Teacher Education Academy Career & Technical Education Course Sequence	
Grade 9	Introduction to Education, Developmental Learning
Grade 10	Multicultural Education, Current Issues in American Education, AP Psychology
Grade 11	Teaching and Learning Across Content Areas, Contemporary Methods of Instruction
Grade 12	Kean University courses in Teacher Education*

\*Kean University course

**CERTIFICATIONS:** Praxis® Core Academic Skills for Educators (CORE), OSHA 10