



Union County Vocational-Technical High School

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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⁺
ACADEMY FOR LAW & JUSTICE
EXERCISE PHYSIOLOGY & RELATED SCIENCES⁺

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 st 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 21st 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