600 Brewer Dr.

Monroe, NC 28112

P: 704.296.3088

F: 704.296.3090

W: cata.ucps.k12.nc.us

Principal

Vicki Merritt

Assistant Principals

Thomas Stewart

Dr. Josh Wall

CENTRAL ACADEMY OF TECHNOLOGY AND ARTS

SCHOOL PROFILE FOR 2021-2022

SCHOOL COUNSELING STAFF

Ashley Cole - Dance, Theatre, & Pre-Engineering

Sarah Goodwin - Information Systems & MPRA

Stephanie Graham - Medical and Transportation

Tammy Tweed - Secretary

MISSION STATEMENT

To prepare students for informed decision-making, effective citizenships, personal achievements, higher education, and rewarding careers. Focused curriculum is offered in the fields of information systems, medical science, performing arts, pre-engineering, and transportation systems

CENTRAL ACADEMY OF TECHNOLOGY AND ARTS opened Fall 2006 and is a comprehensive magnet high school of academies. Each year students rising 9th and 10th grade apply throughout the Union County Public School System for a spot in one of the academy programs. Each student applying must be on grade level using North Carolina End of Grade standards in reading and math. The 9th grade students are selected based on a lottery for all academies except Dance and Theatre; those two academies will participate in an audition process. The 10th grade students are selected on a first come, first serve basis. The 10th grade students applying to the Performing Arts Academy also participate in the audition process.

INFORMATION SYSTEMS ACADEMY: In Computer Engineering students learn about building computers, configuring networks and routing. In Software & Game Design students will focus on computer programming, visualization tools, and game design. In Cyber Security students learn about ethics in technology as well as trends in the growing industry. The solid preparation that is offered prepares our high school graduates to achieve any information systems career goal.

PRE-ENGINEERING ACADEMY: Instruction is offered in engineering design through 3-D software, electronics, and computer integrated manufacturing. These are connected together through engineering principles connecting math, science, and technology. The majority of course are delivered through the Project Lead the Way curricula.

PERFORMING ARTS ACADEMY: Programming is offered in Dance, Theatre, and Music Production and Recording Arts (MPRA). All pathways are exposed to the many facets of a successful performance, history, theory, and techniques. The MPRA pathway creates a solid foundation in musicianship and technology. Students will hone their current skills through a variety of courses that will create a well-rounded performer.

MEDICAL SCIENCES ACADEMY: The goal of the Project Lead the Way program is to provide a sequence of courses all aligned with appropriate national learning standards, which follows a proven hands-on, real-world, problem-solving approach to learning. Students explore the concepts of human medicine and are introduced to topics such as physiology, genetics, microbiology, and public health. The students explore the prevention, diagnosis, and treatment of disease.

TRANSPORTATION SYSTEMS ACADEMY: The Automotive Technology pathway provides instruction on brakes, steering, suspension, engine, and electronics. The Collision Repair pathway offers auto body reconstruction and frame straightening. The curriculum allows students to receive hands-on industry-recommended training. Strong academic background and technical application allow for a seamless transition from high school to post-secondary training or high-tech automotive careers.

COLLEGE PREPATORY ENVIRONMENT: All students are assigned the **Future Ready** course of study.

DIPLOMA REQUIREMENTS: Students must graduate with a minimum of 28 Carnegie credit units.

SCHEDULE: The CATA curriculum is offered on a 4x4 block schedule for all courses. All students receive daily instruction in four 90-minute classes; earning a maximum of one credit per course.

GRADING SCALE: Union County Public Schools requires the following grading scale/point values. Additional quality points are given for a passing grade (60-100) for specific courses based on the course's academic level.

Numeric Grade	Non-Weighted Point
90-100	4.0
89-80	3.0
79-70	2.0
69-60	1.0
AUD, F, FF, P, WF, WP	0.0

Academic Level of Course	Additional Quality Points Given for a Weighted GPA
Basic	No additional points
College Prep	No additional points
Honors	.5 additional points
Advanced Placement	1 additional point

HONORS AND COLLEGE LEVEL COURSES OFFERED AT CATA

Adobe Visual Design	Civil Engineering and Architecture	Human Body Systems	Sports Medicine I, II
Advanced Biology Topics	Computer Integrated Manufacturing	Math I, II, III, IV	Theatre Arts III, IV
Advanced Calculus Topics AB	Computer Programming I, II	Medical Interventions	Visual Arts III, IV
Advanced Chemistry Topics	Concert Chorus III, IV	Network Computer Engineering	Yearbook III, IV
Advanced Inquiry	Dance III, IV	Peer Tutor	Weightlifting
Advanced Manufacturing	Earth Science	Physics	World History
American History I, II	Electronics DC, AC	Pre-Calculus	
Band III, IV	English I, II, III, IV	Principles of Biomedical Science	
Biology I	Engineering Design & Development	Psychology/Sociology	
Biomedical Science	Forensic Science I	Python Programming I, II	
Chemistry	Game Art Design	Robotics I	
Civics	Health Science I	Spanish III, IV	

AP Level course content, pace, and academic rigor are college-level as adopted by the College Board and prepares students to take the AP examinations which may lead to college credit. Most AP classes are yearlong and scheduling conflicts with required academy courses often preclude more than two AP classes per year. In addition, scheduling conflicts with required academy courses can prevent students from taking more than two levels of a World Language.

Advanced Placement (AP) Courses

Aerospace Engineering	Calculus BC	Environmental Science	Psychology
Art-2D Studio	Computer Science A	Government US	Statistics
Biology	Computer Science Principles	Human Geography	US History
Calculus AB	English III, IV	Physics	World History

STUDENT-LED ORGANIZATIONS

Arcade Club	Creative Writing Club	Fishing Club	International Thespian Society	National Honor Society of Dance	Society of Women Engineers
Art Club	Debate Club	Gaming Club	Junior Beta Club	Robotics Club	Student Council
BETA Club	Environmental Club	Gay-Straight Alliance	Makers Club	Science Olympiad	World Language Club
Biology Club	Fashion Club	Hands Helping Others	MPA Ensemble	Shooting Sports Team	World Travel Club
Canine Club	Fellowship of Christian Athletes	HOSA	National Honor Society	Skills USA	Yearbook Club