CENTRAL ACADEMY OF TECHNOLOGY AND ARTS

600 Brewer Drive
Monroe, NC 28112
PHONE: 704.296.3088
FAX: 704.296.3090
WEB: http://cata.ucps.k12.nc.us

Principal
Vicki Merritt

Assistant Principals
Dan Edwards
Josh Wall

SCHOOL PROFILE FOR 2018-2019

SCHOOL COUNSELING STAFF

Sarah Goodwin – Information Systems
Ashley Cole – Performing Arts – Dance & Theatre, & Pre-Engineering
Ashley Lawson – Medical & Transportation
Tammy Tweed – Student Records Coordinator

CENTRAL ACADEMY OF TECHNOLOGY AND ARTS opened Fall 2006 and is a comprehensive magnet high school of academies. Each year students in rising 9th and 10th grade apply from throughout the Union County Public Schools 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.

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.

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 Cybersecurity students learn about ethics in technology, as well as, trends in the growing industry. Although these courses are "deep" in programming and compute logic, 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, digital electronics, and computer-integrated manufacturing. These are connected together through engineering principles connecting math, science, and technology. The majority of courses are delivered through the Project Lead the Way curricula.

MEDICAL SCIENCE ACADEMY: The goal of the Project Lead the Way Biomedical Sciences 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.

PERFORMING ARTS ACADEMY: Programming is offered in Dance, Music Production and Recording Arts (MPRA) and Theatre Arts. All three pathways expose students to the many facets of a successful performance, history, theory, and techniques. Students participate in major performances.

COLLEGE PREPARTORY 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 ninety-minute classes; earning a maximum 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 Value
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 point
AP (Advanced Placement)	1 additional points

HONORS AND COLLEGE LEVEL COURSES OFFERED AT CATA

Honors level courses are offered in the areas of Academy Courses, English, Fine Arts, Math, Physical Education, Science, Social Studies, World Language, and Career and Technical Education. Course content, pace, and academic rigor place high expectations on the student and surpass standards specified by Common Core and Essential Standards.

Honors Courses

Advanced Biology Topics	Computer Integrated Manufacturing	Game Art Design	Psychology/Sociology
Advanced Calculus AB	Computer Programming I, II	Health Science I	SAS Programming
Advanced Chemistry Topics	Concert Chorus III, IV	Human Body Systems	Spanish III, IV
American History I, II	Dance III, IV	Ladies Chorus III, IV	Sports Medicine I & II
Band III, IV	Digital Electronics	Math II, III	Statistics
Biology I	Discrete Math	Medical Interventions	Theatre Arts III, IV
Biomedical Science	Drafting	Mixed Chorus III, IV	Visual Arts III, IV
Chemistry	Earth Science	Network Computer Engineering	Yearbook III, IV
Civics	English I, II, III, IV	Physics	World History
Civil Engineering	Engineering Design	Pre-Calculus	
Computer Engineering	Forensic Science I	Principles of Biomedical Science	

AP level course content, pace, and academic rigor are college-level as adopted by the College Board and prepare 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, the scheduling conflicts with required academy courses can prevent students from taking more than two levels of a World Language.

AP (ADVANCED PLACEMENT) COURSES

Aerospace Engineering	Calculus BC	English III, IV	Psychology
Art-2D Studio	Chemistry II	Environmental Science	US History
Biology II	Computer Science	Government US	
Calculus AB	Computer Science Principles	Physics I	

STUDENT LED ORGANIZATIONS

BETA Club	Fashion Club	Jazz Band	Shooting Sports Team
Biology Club	Fellowship of Christian Athletes	MPA Ensemble	Skills USA
Black History Month Club	Fishing Club	National Honor Society	Society of Women Engineers
Chess Club	Gaming Club	National Honor Society of Dance	Student Council
Creative Writing Club	Hands Helping Others	Robotics	World Travel Club
Debate Club	HOSA	SADD	World Language Club
Environmental Club	Intramural Men's Volleyball	Science Olympiad	