



# CENTRAL ACADEMY OF TECHNOLOGY AND ARTS

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**Principal**  
**Kim Fisenne**

**Assistant Principals**  
Dan Edwards  
Josh Wall  
Deanna White

## SCHOOL PROFILE FOR 2015-2016

### SCHOOL COUNSELING STAFF

Mini D'Rozario – Information Systems  
Kendall Cameron – Performing Arts & Pre-Engineering

Ashley Lawson – Medical, Teacher Prep, & 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 9<sup>th</sup> and 10<sup>th</sup> 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 9<sup>th</sup> 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 10<sup>th</sup> grade students are selected on a first come, first serve basis. The 10<sup>th</sup> 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, teaching, 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. Although these courses are “deep” in programming and computer logic, the solid preparation that is offered prepares our High School graduates to achieve any IT 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.

**TEACHER PREPARATION ACADEMY:** The goal of the Teacher Preparation Academy is to prepare high school students for further education and careers in the education profession. Students will be able to focus on teaching as a profession, human growth and development, and curriculum and instruction. Classroom instruction will help the student understand various cultures and practices that may affect the learning process.

**PERFORMING ARTS ACADEMY:** Programming is offered in Dance and Theatre Arts. Both pathways expose students to the many facets of a successful performance, history, theory, and techniques. Students participate in major performances.

**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 PREPARATORY 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	1 additional point
AP (Advanced Placement)	2 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	Principles of Biomedical
Advanced Calculus AB	Computer Programming I, II	German III, IV	Psychology/Sociology
Advanced Chemistry Topics	Computer Science	Health Science I, II	SAS Programming
Advanced US History	Concert Chorus III, IV	Human Body Systems	Spanish III, IV
American History I, II	Dance III, IV	Ladies Chorus III, IV	Sports Medicine I
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 I	Earth Science	Networking	Yearbook III, IV
Civics	English I, II, III, IV	Physics	World History
Civil Engineering	Engineering Design	Pre-Calculus	
Computer Engineering			

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

#### STUDENT LED ORGANIZATIONS

Art Club	Gaming Club	Jazz Band	Shooting Sports Club
Beta Club	Gay/Straight Alliance	National Honor Society	Skills USA
Environmental Club	German Club	Resonance Wind Quartet	Speech & Debate Club
Fellowship of Christian Athletes	Guitar Club	Robotics	Student Council
FTA - Future Teachers of America	Hands Helping Others	SADD	Travel Club
	HOSA	Science Olympiad	