



MAXWELL HIGH SCHOOL OF TECHNOLOGY

Program Information Sheet

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www.maxwellhigh.com



Maxwell High School of Technology provides half day¹ programs that prepare students to enter the service industry or a post-secondary institution by providing Career, Technical and Agricultural Education (CTAE) training that encompasses valuable academic, technical, and employability skills. Students from all GCPS high schools may obtain three concentrated units of credit in a Georgia Department of Education Career Pathway by successfully completing a Maxwell program. In addition, Maxwell offers embedded academic courses for graduation credit in language arts, math and science.

Embedded credit is credit earned in an academic area of study (language arts, math or science) while enrolled in a CTAE pathway program. For example, the Construction and HVACR programs offer a Board of Regents math credit because those programs are heavily embedded with the math skills contained in the Mathematics of Industry and Government course. The Graphic Design program offers a Board of Regents language arts credit because this program is heavily embedded with the language arts skills contained in the Advanced Composition course.

All Maxwell programs offer **Board of Regents (BOR) credit** in one of the academic areas of language arts, math or science, as well as technical credits for CTAE coursework.

Eligibility to apply/attend Maxwell High School of Technology does not count high school credits earned in middle school, and includes the following:

GCPS *Non-Academy* high school students:

- current sophomore or junior, enrolled in a GCPS *non-Academy* high school with a minimum of 8 credits at the time of application and,
- a minimum of 11 credits, including 2 units of LA, MA and SC, and be on track for graduation from high school in order to attend at the start of the school year.

GCPS *Academy* high school students:

- current freshman, sophomore or junior enrolled in a GCPS *Academy* high school with a minimum of 4 credits at the time of application and,
- a minimum of 7 credits, including 1 unit each of LA, MA and SC, and be on track for graduation from high school in order to attend at the start of the school year.

¹Maxwell High School provides bus transportation to and from home schools.

MAXWELL PROGRAM DESCRIPTIONS

*Indicates Board of Regents academic course credit for pathway

ARCHITECTURAL DRAWING & DESIGN *Language Arts

This program will expose students to blueprint reading, measuring, sketching, and drawing through engineering, architecture, drafting, and design processes. All drawing is computer-based using industry-standard software programs including AutoCAD, AutoCAD Architecture, and Revit Architecture.

AUTOMOBILE MAINTENANCE & LIGHT REPAIR *Science

Classroom labs model a professional automotive shop setting that simulates an industry-standard service facility. Students will perform automotive problem diagnosis, service, and repair in four basic areas: brakes, electrical/electronic systems, steering and suspension, and engine performance.

CARPENTRY *Math

Simulating real construction conditions, students will gain skills in carpentry, plumbing, masonry, and electrical wiring with emphasis on safety, tool use and care, and blueprint reading.

COLLISION REPAIR I *Math

This industry-certified program will teach students how to perform automotive vehicle body repair and refinishing skills such as panel replacement, metal straightening, welding and automotive painting. Students will bring damaged vehicle components to their original condition using state-of-the-art equipment and technology in the automotive lab.

CULINARY ARTS *Science

Students will learn the essential skills of professional cooking from an industry expert, including food preparation, knife skills, dining room service, menu development, restaurant accounting, and teamwork in the kitchen. Students will study many branches of science and the rapid advances in technology used in the food industry to expand and improve the food supply; they will evaluate the effects of processing, preparation, and storage on quality & safety, wholesomeness, and nutritive value of foods.

EARLY CHILDHOOD EDUCATION *Science

Lesson planning, teaching skills, nutrition, and menu planning are learned in the classroom and applied when students begin working with children three to five years of age in Maxwell's Early Childhood Lab. *(Note: The State of Georgia requires all employees in Georgia child care facilities [i.e., students enrolled in Maxwell's Early Childhood Education Program (ECE)] to undergo a national criminal background check. Students enrolled in ECE will be subject to the rule. The cost of the background check will be covered by the ECE program for those students accepted into the program.)*

ELECTRONICS *Science

This class will prepare students for a career using electronics skills, or for further education in the modern field of electronics. Students will build circuits, motors and amplifiers to become familiar with producing, testing, troubleshooting, and documenting electronics projects.

FIRE & EMERGENCY SERVICES/FIREFIGHTING *Math

This course addresses the essential components needed for fire and emergency services: firefighting, emergency medical responder, and public safety communications. Students will explore career options, interagency communications, medical services, and basic firefighting services.

FLIGHT OPERATIONS *Science

Students will build a solid knowledge base in the history of aviation, the principles of flight and navigation, the aerospace community, and aviation meteorology. Leadership development activities through the Civil Air Patrol (CAP), the Experimental Aircraft Association (EAA), and industry mentorship will prepare students with a competitive edge for the global marketplace.

GRAPHIC DESIGN *Language Arts

Using state-of-the-art computers and digital imaging equipment, students will learn cutting edge software applications such as Adobe Photoshop, Illustrator, InDesign, Flash and Dreamweaver. Instruction is designed to give students maximum opportunity to learn image generation and manipulation for such projects as book covers and magazines, CD/video game art, advertising campaigns, posters, and websites.

HVACR (Heating, Ventilation, AC and Refrigeration) *Math

This program prepares students for a career in residential and commercial heating, ventilations, air conditioning, and refrigeration repair.

LAW ENFORCEMENT SERVICES/FORENSIC SCIENCE *Science

Focusing on the causes, prevention, investigation, and prosecution of crime, the Law Enforcement Services program allows students to explore the role and structure of government, the rights and responsibilities of citizens and police, the criminal justice system, and courts and corrections.

MANUFACTURING *Science

Manufacturing is behind all the products we buy and use. In our community, manufacturing is a source of wealth and jobs. Manufacturing professionals design machinery, develop products, repair robots, work with software, and utilize green technology. This class is a student's chance to turn an interest in solving puzzles, robotics, repairing cars, building with Legos, and more, into a career. This program uses practical applications that may be learned in engineering classes at a student's home school.

PERSONAL CARE SERVICES (Cosmetology) *Science

This program will help shape students' ability to create and design using hair, skin and nails as a creative medium. In a true-to-life salon environment, students will learn theories and techniques in hair cutting and styling, manicures, perms, facials, as well as record keeping and business practices for entrepreneurs.

PROGRAMMING (Apps & Game Design) *Science

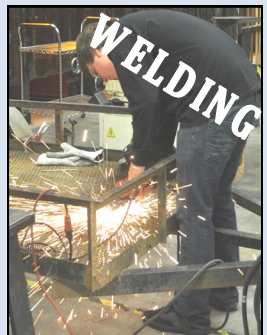
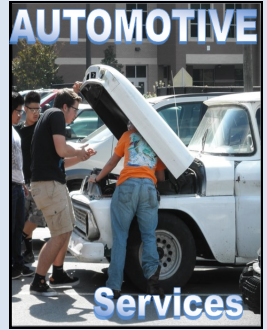
This course will explore the use of computer technology to create games and mobile apps. This includes learning to use hardware, software, data structures and access, algorithms, programming techniques, an object-oriented language, computing environments, and the client/server system.

THERAPEUTIC SERVICES *Science

This industry certified class emphasizes anatomy and physiology, medical terminology, and medical skills utilized in all areas of healthcare. Specialization may include any one of the following: Allied Health, Emergency Medical Responder, or Sports Medicine. Program specialization choice is not guaranteed. Class placement may be determined using a lottery system.

WELDING *Math

Students will gain knowledge of industrial and construction welding, become proficient utilizing a variety of welding techniques, learn to read blueprints, interpret welding drawings and sketches, learn safety rules, and be eligible to earn certification in welding technologies.





MAXWELL HIGH SCHOOL OF TECHNOLOGY

CAREER CLUSTERS/PATHWAY OFFERINGS

What is a CTAE Pathway?

Career, Technical and Agricultural Education (CTAE) offers students the opportunity to take three career classes in a concentrated area of “Career Clusters” and “Pathways”.

Examples of Career Clusters include:

Architecture, Construction, Education, Health Science, Human Services, Transportation, Distribution, Logistics, and more.

Examples of Pathways include:

Architectural Drawing & Design, Automobile Maintenance & Light Repair, Early Childhood Care & Education I, Personal Care Services, Manufacturing, Therapeutic Services, Welding, and many more.

(A full list of CTAE Career Clusters and Pathways can be found on the GADOE website: <http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/cluster-pathway-courses.aspx>)

ARCHITECTURE AND CONSTRUCTION

Architectural Drawing & Design

- Introduction to Drafting & Design
- Architectural Drawing & Design I
- Architectural Drawing & Design II

Carpentry

- Industry Fundamentals & Occupational Safety
- Introduction to Construction
- Carpentry I

HVACR (Heating, Ventilation, Air Conditioning, & Refrigeration)

- Industry Fundamentals & Occupational Safety
- Introduction to HVACR Systems
- Heating, Ventilation, Air Conditioning, & Refrigeration

Welding

- Industry Fundamentals & Occupational Safety
- Introduction to Metals
- Welding I

ARTS, AV/TECHNOLOGY, AND COMMUNICATIONS

Graphic Design

- Introduction to Graphics & Design
- Graphic Design & Production
- Advanced Graphic Design

EDUCATION AND TRAINING

Early Childhood Education I

- Early Childhood Education I
- Early Childhood Education II
- Early Childhood Education III

HEALTH SCIENCES

Therapeutic Services

Allied Health

- Introduction to Healthcare Science
- Essentials of Healthcare
- Allied Health & Medicine

Emergency Medical Responder

- Introduction to Healthcare Science
- Essentials of Healthcare
- Emergency Medical Responder

Sports Medicine

- Introduction to Healthcare Science
- Essentials of Healthcare
- Sports Medicine

HOSPITALITY & TOURISM

Culinary Arts

- Introduction to Culinary Arts
- Culinary Arts I
- Culinary Arts II

HUMAN SERVICES

Personal Care Services/ Cosmetology

- Introduction to Personal Care Services
- Cosmetology Services II
- Cosmetology Services III

INFORMATION TECHNOLOGY

Programming

- Introduction to Digital Technology
- Computer Science Principles
- Programming, Games, Apps & Society

LAW, PUBLIC SAFETY, CORRECTIONS, AND SECURITY

Fire & Emergency Services/ Firefighting

- Introduction to Law, Public Safety, Corrections & Security
- Essentials of Fire & Emergency Services
- Applications of Firefighting

Law Enforcement Services/ Forensic Science

- Introduction to Law, Public Safety, Corrections & Security
- Criminal Justice Essentials
- Forensic Science & Criminal Investigations

MANUFACTURING

Manufacturing

- Foundations of Manufacturing & Materials Science
- Robotics & Automated Systems
- Production Enterprises

Science, Technology, Engineering, Mathematics

Electronics

- Foundations of Electronics
- Advanced AC & DC Circuits
- Digital Electronics

TRANSPORTATION, DISTRIBUTION AND LOGISTICS

Automobile Maintenance & Light Repair

- Basic Maintenance & Light Repair
- Maintenance & Light Repair 2
- Maintenance & Light Repair 3

Collision Repair - Painting & Refinishing

- Introduction to Collision Repair
- Painting & Refinishing I
- Painting & Refinishing II

Flight Operations

- Fundamentals of Aerospace
- Flight Operations I
- Flight Operations II