mpac

Career Technical Education



Montgomery Public Schools

### **MPACT:**

Your Future Begins Here!

Welcome to Montgomery Preparatory Academy for Career Technologies (MPACT), where technical training and technology meet and students thrive!

Our students learn in real-world environments under the direction of highly skilled trade professionals who bring many years of experience to the classroom. With the specialized training acquired at MPACT, students have the opportunity to graduate high school with industry-recognized certifications and earn college course credit through dual enrollment at Trenholm State Community College.

MPACT serves students in grades 10-12. Students will attend one of three sessions at MPACT and receive their core courses at their home school. Transportation will be available between MPACT and the home schools. Students are encouraged to investigate the various program opportunities.

If you are interested in pursuing a high-wage and high-demand career, then MPACT is the place for you!

### Student Selection Criteria

Students who will be entering grades 10, 11, or 12 in the next school year are eligible for admittance to MPACT based upon the following criteria:

A completed application

Career Interest Inventory Assessment (Kuder)

Students must have a GPA of 2.0 to apply for Dual Enrollment in the following programs: Automotive, Electrical Technology, Medical Science, and Welding.

Earned at least 4 high school credits from the previous grade level (Including math, science, English, and social studies)

No more than 1 credit deficiency toward graduation

Orientation interview in selected major (Students will be interviewed at their zoned high schools during the spring semester)

### **Admissions Process**

The admissions process involves a review of student records and applications. Application to MPACT requires the following steps:

**Completed Application** 

Attach a copy of your current report card

MPS will be responsible for attaining all other necessary student records

Submit the application to MPACT at the following address:

MPACT, 2901 E. South Blvd, Montgomery, AL 36116

# Criteria to Remain in the Program

Maintain a 2.0 in your major

Maintain satisfactory attendance

Maintain satisfactory behavior



## **BUILDING CONSTRUCTION**

Courses in the building construction program will ground the trainee in the basic knowledge and principles of carpentry, masonry, concrete finishing, electrical work, HVAC and plumbing. They will become skilled in different phases of a project from start to finish.

#### **Course Offerings:**

- NCCER Core
- NCCER Building Construction 1 Construction Framing
- NCCER Building Construction 2 Site Preparation
- NCCER Building Construction 3 Construction Finishing
- CTE Lab Architecture & Construction

Career Tech Student Organization: SkillsUSA

- NCCER Core
- NCCER Carpentry
- NCCER Carpentry Level I





# **ELECTRICAL TECHNOLOGY**

Electricians install electrical systems in structures; they install wiring and other electrical components, such as circuit breaker panels, switches, and light fixtures and they follow blueprints, the National Electrical Code® and state and local codes. To prepare trainees for a career in the electrical field, this program utilizes NCCER's comprehensive, 4-level Electrical curriculum that complies with DOL time-based standards for apprenticeship.

#### **Course Offerings:**

- NCCFR Core
- NCCER Electrical Technologies 1
- NCCER Electrical Technologies 2
- MSSC Safety/ MSSC Quality
- MSSC Production/MSSC Maintenance Awareness
- CTF Lab Architecture & Construction

Career Tech Student Organization: SkillsUSA

- NCCER Core
- NCCER Electrical 1
- NCCER Electrical 2
- MSSC (Manufacturing Skill Standards Council)
- Ready To Work Alabama



### HEATING, VENTILATION, AIR CONDITIONING, AND REFRIGERATION (HVAC/R)

The increasing development of HVAC (heating and air-conditioning systems) technology causes employers to recognize the importance of continuous education and keeping up to speed with the latest equipment and skills. This program utilizes NCCER's curriculum is designed by highly qualified subject matter experts with this in mind. North American Technician recognizes the curriculum Excellence (NATE) and presents theoretical and practical skills essential to your success as an HVAC installer or technician.

#### Course Offerings:

- NCCER Core
- NCCER HVAC 1
- NCCER HVAC 2
- NCCER HVAC 3
- CTE Lab Architecture & Construction

Career Tech Student Organization: SkillsUSA

- NCCER Core
- NCCER HVAC Level 1





### WELDING

Welding is a highly professional industry that can take you places worldwide. From ladders to aircraft carriers, from NASCAR to national defense, and from the laboratory to sales and repair, the varied welding industry impacts virtually every industry. Technology is creating more uses for welding in the workplace. For example, new ways are developing to bond dissimilar and non-metallic materials, such as plastics, composites, and new alloys.

Also, advances in laser beam and electron beam welding, new fluxes, and other new technologies and techniques all point to an increasing need for highly trained and skilled workers. This program utilizes NCCER's four-level curriculum covering topics such as Oxyfuel Cutting, Welding Symbols and Stainless-Steel Groove Welds. NCCER's curriculum also correlates to the AWS standards and guidelines for an Entry Welder.

#### **Course Offerings:**

- NCCER Core
- NCCER Welding 1
- NCCER Welding 2
- NCCER Welding 3
- NCCER Welding 4
- CTE Lab Architecture & Construction Career Tech

Student Organization:

SkillsUSA

- NCCER Core
- NCCER Welding 1
- Ready To Work Alabama



### **ADVERTISING DESIGN**

Advertising Design provides students with orientation experiences and laboratory safety for working in an advertising design studio environment. Topics of study include art history, art production, art criticism, design elements and principles, and materials and media utilized in the field of visual communication. Placing particular emphasis on related academic skills. Instruction also includes information regarding various computer operations, applications, and procedures, type styles, desktop publishing, layout, and design techniques, mechanical production files, formats, and technology in the workplace.

#### Course Offerings:

- Foundation of Arts, Audio-Video Technology, and Communication
- Introduction into Advertising & Design
- · Digital Design
- Graphic Illustration
- Studio & Portfolio
- Senior Career Pathway Project Arts, A/V Tech and Communications

Career Tech Student Organization:

SkillsUSA

- Adobe Certified Associate (ACA) Illustrator
- Adobe Certified Associate (ACA) Photoshop





## **HEALTH SCIENCE**

The health science program instructional Content incorporates project-and-problem based Healthcare practices and procedures demonstrate knowledge and skills fundamental to various healthcare careers. Knowledge and skills are reinforced and enhanced through participation in HOSA - Future Health Professionals and work-based learning opportunities that are age and grade-appropriate.

#### Course offerings:

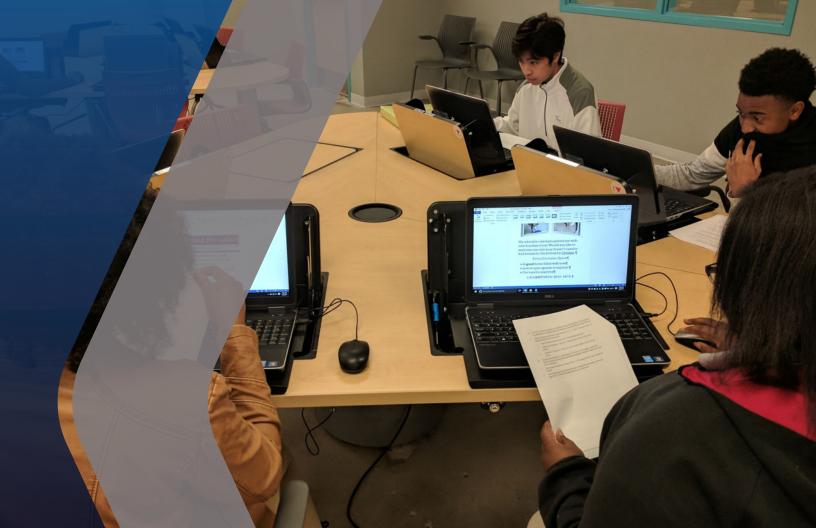
- Foundations of Health Science
- Sports Medicine Fundamentals
- Sports Medicine Intermediate
- Patient Care Technician
- Human Body Structures and Functions
- Emergency Services
- Medical Terminology
- Therapeutic Services
- Health Science Internship

Career Tech Student Organization:

Health Occupations Students of America (HOSA)

- Certified Patient Care Technician
- BLS Instructor





### **NETWORK SYSTEMS AND COMPUTER SERVICES**

This program is for students who are interested in careers that involve information technology security, network analysis, planning, and implementation, including design, installation, repair, maintenance, and management of network systems. Courses provide an overview of the knowledge and skills required in a network and systems administration.

#### **Course Offerings:**

- Information Technology Fundamentals
- Networking I
- Networking II
- Networking III
- Foundations of Informational Security
- Senior Career Pathway Project IT

Career Tech Student Organization:

SkillsUSA

- TestOut Network Pro
- TestOut Security Pro





## LAW ENFORCEMENT SERVICES

This program is for students who are interested in pursuing careers in law enforcement and forensic science. The student will learn the role and responsibilities of a law enforcement officer; discuss relevant rules, regulations, and laws; and demonstrate defensive tactics, police patrol techniques, and CPR and First Aid procedures as used in emergencies. Meeting and maintaining physical fitness standards for law enforcement is also emphasized in this course. The courses also focus on career opportunities, safety, history of forensic science, criminal investigation, forensic serology and DNA testing, forensic studies in anthropology, toxicology, fingerprinting, firearms, physics, and document examination.

#### **Course Offerings:**

- Introduction to Public Safety
- Law Enforcement & Corrections
- Advanced Law Enforcement
- Forensic Science & Crime Scene Investigations
- CTE Lab Law, Safety, Corrections & Security

Career Tech Student Organization:

SkillsUSA

- APCO Public Safety
- Telecommunicator I



### **EMERGENCY & FIRE MANAGEMENT SERVICES**

This program is for students who are interested in pursuing careers in emergency and fire management services. Courses provide students with information regarding career possibilities in firefighting, including instruction in the application of firefighting techniques, the emergency medical profession, and specialized public service jobs. Topics include forcible entry; tactical ventilation; fire control; loss control; fire origin and cause determination; firefighter survival; hazards, behavior, and identification of hazardous materials and weapons of mass destruction; and dangerous material operations, product control and personal protective equipment. Students who complete Fire Science I and II and pass the certification tests will earn 160 of the 360 hours required to complete Alabama Fire College Firefighter I and II certifications.

#### **Course Offerings:**

- Introduction to Public Safety
- · Firefighting I
- Fire Science I
- Fire Science II
- Emergency Services & Management
- Senior Career Pathway Project Law, Public Safety, Corrections & Security
- CTE Lab Law, Public Safety, Corrections, and Security

Career Tech Student Organization:

SkillsUSA

- National Fire Protection
- Association Standard NFPA1001



## **MODERN MANUFACTURING**

Modern Manufacturing is a CTE program designed to give the participating student stakeholders the necessary training needed for gainful employment within Region 5's manufacturing workforce. Students will earn certificates in OSHA 10, NCCER and MSSC (certified production technician). There is a tremendous demand within Region 5 manufacturing industry for this program.

#### **Course Offerings:**

- Workforce Essentials (Includes NCCER Core)
- Manufacturing 2
- MSSC
- MSSC Safety and Quality
- MSSC Production/Maintenance Awareness
- CTE Lab Manufacturing
- Senior Career Pathway Project Manufacturing

**Career Tech Student Organization:** 

SkillsUSA

- NCCER Core
- MSSC Certified Production Technician





# Jobs for Alabama Graduates (JAG)

Jobs for Alabama's Graduates (JAG) identifies and provides educational support and success strategies for Alabama's students. The mission of JAG is to help young people of great promise succeed in both school and on the job, leading to productive and rewarding careers. JAG partners eligible students with JAG Specialists who mentor, equips, and provides the support needed to graduate and succeed after high school. The MPS JAG Multi-Year Program lasts up to 36 months and includes over 700 hours of professional JAG specialist support. Prospective students are identified in 9th grade and begin the JAG program in their 10th-grade year and continue through graduation. This early intervention includes classroom instruction, counseling, employability skills development, and job placement services result in a graduate with a quality job or enrollment in post-secondary education and training program to further their career pursuit.

#### **Course Offerings:**

- JAG 1
- JAG 2
- JAG 3
- JAG 4
- JAG 5
- JAG 6

Career Tech Student Organization:

JAG





### **Dual Enrollment**

Dual enrollment is designed for high school students who want to begin their college careers before they graduate. Students may pursue dual enrollment in college-level courses concurrently with high school courses and receive both high school and college credit upon successfully completing a dual enrollment course.

Dual enrollment offers several advantages. It can help offset college expenses for families, shorten the time it takes to earn a degree and helps qualified students reduce their course load per term when they attend a two-year or four-year college full time. Students may enroll in academic, and Career and Technical Education courses per established guidelines by the Department of Postsecondary Education. Refer to the ALSDE Dual Enrollment Equivalency List for credits awarded at the high school level: https://www.alabamaachieves.org/

For more information about dual enrollment, contact your guidance counselor.

NOTE: Students that take all MSSC courses will graduate with a short certificate from Trenholm State Community College.



#### MR. TODD DAVIS, DIRECTOR - CAREER & TECHNICAL EDUCATION

MR. RICK ROBINSON, ASSISTANT PRINCIPAL

#### MONTGOMERY PREPARATORY ACADEMY FOR CAREER TECHNOLOGIES

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The Montgomery County Board of Education operates under the following policy: "No person shall be excluded from participation in, or denied benefits of, or be subjected to discrimination in any program or activity based on handicap, sex, race, religion, belief, national origin, or ethnic group."