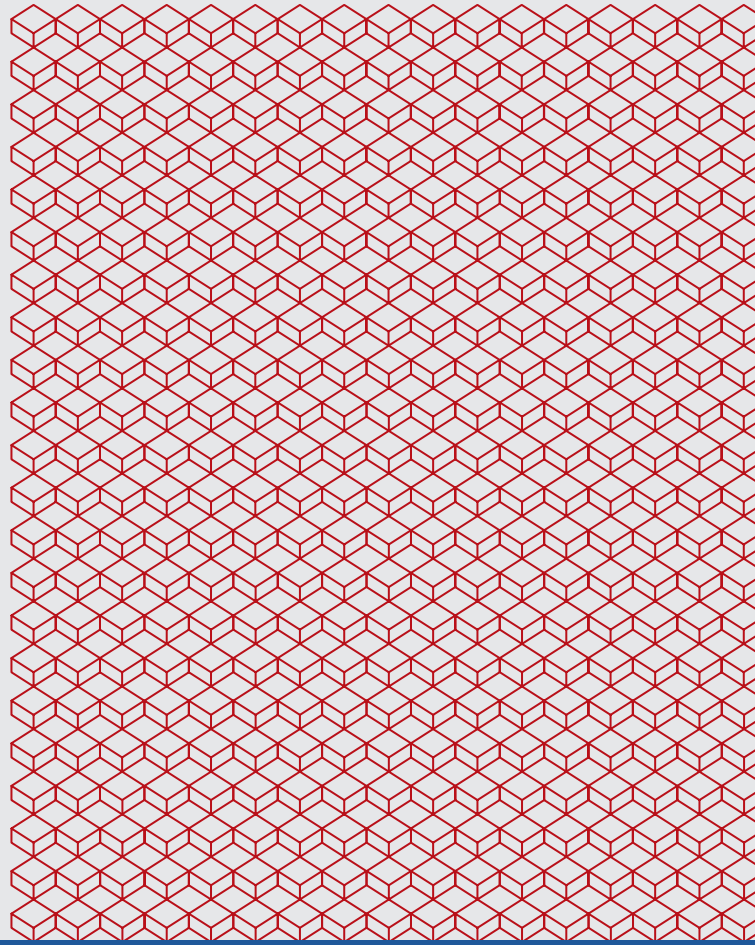


**YOUR FUTURE**



**BEGINS HERE!**



**MONTGOMERY PUBLIC SCHOOLS**

**CAREER & TECHNICAL  
EDUCATION**



# TITLE IX STATEMENT

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 on the basis of handicap, sex, race, religion, belief, national origin, or ethnic group.”

## FROM THE DESK OF THE DIRECTOR

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Montgomery Public Schools has fifteen different Career Technical Education (CTE) clusters, in which twenty-six different programs are offered. Throughout the district there are seventy-six CTE instructors at one of the nine middle schools, seven high schools, as well as one career tech center that offers CTE courses. Career and Technical Education clusters are educational avenues for students to get a head start when going on to college or entering a career field right out of high school. CTE classes create a competitive advantage for students since the coursework aligns to current industry skills, standards and knowledge. Each of the programs in our district has state-of-art-equipment. Each CTE program consists of a collection of relevant and articulated elective high school classes that begin in either 9th or 10th grade. Career and Technical Education classes include a mix of traditional classroom experiences and a variety of hands-on learning. Within each cluster, students explore related careers and many pathways that lead to industry certifications, postsecondary credits and/or an industry externship.

Students have the opportunity to participate in a Career and Technical Student Organization (CTSO) which provides students with opportunities to develop leadership skills as well as competition opportunities to showcase their CTE skills. These three- and four-year “programs” of elective classes are designed to help students develop the technical and professional skills, knowledge, and attitudes necessary to successfully enter today’s workforce and/or college with confidence and a more focused career direction. Each pathway is guided by an Advisory Committee and filled by committee members who are local employers and postsecondary college representatives that provide support in maintaining robust curriculum aligned to current industry practices.

Todd E. Davis



“  
Our goal is to provide business & industry in our region with a skilled workforce that is prepared for work or post-secondary education after graduation.”

## YOUR FUTURE BEGINS HERE!

Montgomery Public Schools Career & Technical Education (CTE) Programs are preparing students for a complex, highly competitive world that demands advanced skills. With over 25 programs available to secondary students, our course offerings are both engaging and comprehensive. Our programs help students to acquire the knowledge and skills to fulfill college or technical school entrance requirements, receive industry certification, or immediately move into the workforce after graduation.

Students have the opportunity to explore programs of study in diverse fields such as Industrial Maintenance, Legal Services, Health Science, Education, Business & Finance, Electrical Technology and Advertising Design.

These programs combine hands-on-technical training with core academic subject matter and

project-based instruction designed to reflect real world environments in which students will work. CTE students also have the opportunity to gain practical career experience through internships with local businesses as well as educational opportunities with two-year and four-year institutions.

In addition, an advisory board made up of professionals from various fields works closely with each program to ensure that the curriculum provides students the relevant training, learning experiences and high-demand skills employers seek.

Our goal is to provide business & industry in our region with a skilled workforce that is prepared for work or post-secondary education after graduation. Our mission is to make sure that students take advantage of the opportunities that CTE offers as they matriculate through their secondary education experience.

## STUDENT CHECKLIST

### GETTING STARTED IN CAREER & TECHNICAL EDUCATION:

#### GRADE 8:

- Begin thinking about the high school classes that will prepare you for college and careers
- Take the most difficult classes you can handle
- Develop good study habits
- Practice setting and reaching goals
- Research your career options based on your interests, talents and goals (the Kuder Career Assessment can help you identify what careers are best suited for you [www.al.kuder.com](http://www.al.kuder.com))
- Choose a Career Tech program
- Develop a four year education plan with the assistance of your school counselor and/or career coach
- Talk with your school counselor and/or your career coach about Career Technical Education programs available in the high school you will be attending

#### GRADE 9:

- Continue to research your career options based on your interests, talents and goals
- Meet with your high school counselor to discuss the courses and electives you will need to take
- Focus on building a strong academic record

#### GRADE 10:

- Continue to focus on building a strong academic record
- Seek out internship or work-based learning opportunities
- Consider taking the preliminary SAT (PSAT) or ACT if you plan to attend a two-year or four-year college or university in the future
- Apply for summer jobs or volunteer opportunities that are related to your career interest
- Explore Advanced Placement courses that will earn college credit
- Identify dual enrollment courses you can take
- Talk with your Career & Technical Education instructor about earning an industry recognized Career Readiness Indicator

#### GRADE 11:

- Meet with your high school counselor to discuss Advanced Placement and/or dual enrollment options
- Make sure you are on track to meet all high school graduation requirements
- Register to take the ACT or SAT (testing dates are available January through June)
- Begin researching two-year or four-year colleges or training programs related to your career goals
- Attend college and financial aid events
- Arrange campus visits to the schools that interest you
- Talk with your Career & Technical Education instructor about earning an industry recognized Career Readiness Indicator if you haven't earned one
- Apply for summer jobs or volunteer opportunities related to your career interest
- Talk with your guidance counselor if you are thinking about taking the Armed Services Vocational Aptitude Battery (ASVAB)

#### GRADE 12:

- Continue doing your best work (most colleges and universities require a final transcript before making an official offer of acceptance)
- During the fall semester, register to take the ACT or SAT if you haven't already done so or if you would like to improve your score
- Begin applying for college or training programs
- Talk with your Career & Technical Education instructor about earning an industry recognized Career Readiness Indicator if you haven't earned one
- Apply for summer jobs or volunteer opportunities related to your career interest
- Prepare for the ACT WorkKeys Assessment

**It is recommended that students select courses within one of the programs that aligns with their interest and career goal. Career & Technical Education (CTE) students will have the opportunity to earn a Career Readiness Indicator (CRI), if one is offered, within their program which is recognized as an industry certification.**

YOUR FUTURE BEGINS HERE!

# CLUSTER: AGRICULTURE, FOOD AND NATURAL RESOURCES

YOUR FUTURE BEGINS HERE!

# CLUSTER: ARCHITECTURE AND CONSTRUCTION

**PROGRAM:**  
PLANT SCIENCE

Description: This program is designed to provide students with an understanding of the greenhouse, horticulture and nursery/landscape industries.

**Course Offerings:**

- Fundamentals of Agriscience
- Horticulture Science
- Greenhouse and Nursery Production
- Landscape Design and Management
- CTE Lab - Agriculture, Food and Natural Resources

**Career Tech Student Organization:**

Future Farmers of America (FFA)



**SCHOOL(S)**

Park Crossing High School



**SCHOOL(S)**

MPACT



**CAREER READINESS  
INDICATOR(S)**

Landscape Design & Turf  
Management



**CAREER READINESS  
INDICATOR(S)**

NCCER Core  
NCCER Carpentry Level I

**PROGRAM:**  
BUILDING CONSTRUCTION

Description: 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. He or she will become skilled in different phases of a project from start to finish..

**Course Offerings:**

- Architecture Construction and Manufacturing
- 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

YOUR FUTURE BEGINS HERE!

# CLUSTER: ARCHITECTURE AND CONSTRUCTION

YOUR FUTURE BEGINS HERE!

# CLUSTER: ARCHITECTURE AND CONSTRUCTION

## PROGRAM:

### DRAFTING DESIGN TECHNOLOGY

Description: Courses in the drafting program are designed to enable students to pursue a successful career in an architectural, engineering, or industrial field. Students learn technical, mechanical drafting, and computer-aided drafting.

#### Course Offerings:

- Introduction to Drafting Design
- Intermediate Architectural Design
- 3D Solid Model Design I

#### Career Tech Student Organization:

SkillsUSA



### SCHOOL(S)

Brewbaker Technology Magnet High School



### CAREER READINESS INDICATOR(S)

Autodesk CAD Certified User



### SCHOOL(S)

MPACT



### CAREER READINESS INDICATOR(S)

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

## PROGRAM:

### ELECTRICAL TECHNOLOGY

Description: 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:

- Architecture, Construction, and Manufacturing
- NCCER Electrical Technologies 1
- NCCER Electrical Technologies 2
- MSSC Safety/ MSSC Quality
- MSSC Production/MSSC Maintenance Awareness
- CTE Lab - Architecture & Construction

#### Career Tech Student Organization:

SkillsUSA



YOUR FUTURE BEGINS HERE!

# CLUSTER: ARCHITECTURE AND CONSTRUCTION

YOUR FUTURE BEGINS HERE!

# CLUSTER: ARCHITECTURE AND CONSTRUCTION

## PROGRAM:

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

Description: 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 that has been designed by highly qualified subject matter experts with this in mind. This curriculum is recognized by North American Technician Excellence (NATE) and presents theoretical and practical skills essential to your success as an HVAC installer or technician.

### Course Offerings:

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

### Career Tech Student Organization:

SkillsUSA



### SCHOOL(S)

MPACT



### CAREER READINESS INDICATOR(S)

NCCER Core

NCCER HVAC Level 1



### SCHOOL(S)

MPACT



### CAREER READINESS INDICATOR(S)

NCCER Core

NCCER Welding Level I

Ready To Work Alabama

## PROGRAM:

WELDING

Description: Welding is a highly skilled industry that can take you places all over the world. 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 being developed to bond dissimilar materials 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:

- Architecture, Construction, and Manufacturing
- NCCER Welding 1
- NCCER Welding 2
- NCCER Welding 3
- NCCER Welding 4
- CTE Lab - Architecture & Construction

### Career Tech Student Organization:

SkillsUSA



YOUR FUTURE BEGINS HERE!

# CLUSTER: ARTS, AUDIO VISUAL TECHNOLOGY, AND COMMUNICATION

## PROGRAM:

### ADVERTISING DESIGN

Description: 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. Particular emphasis is placed 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



### SCHOOL(S)

Brewbaker Technology Magnet High School

MPACT



### CAREER READINESS INDICATOR(S)

Adobe Certified Associate (ACA) Illustrator

Adobe Certified Associate (ACA) Photoshop



### SCHOOL(S)

Jefferson Davis High School

Lee High School



### CAREER READINESS INDICATOR(S)

Microsoft Office Specialist (MOS)

IC3 Global Standard 6

YOUR FUTURE BEGINS HERE!

# CLUSTER: BUSINESS MANAGEMENT AND ADMINISTRATION

## PROGRAM:

### BUSINESS MANAGEMENT AND ADMINISTRATION

Description: This program is for students who are interested in pursuing careers in business administration and management. Courses provide an overview of career opportunities, which are available in every sector of the economy and requires specific skills in organization, time management, customer service, communication, and effective use of technology.

#### Course Offerings:

- Business Technology Applications
- Advanced Business Technology Applications
- Business Essentials
- Multimedia Design
- Multimedia Publications

#### Career Tech Student Organization:

- DECA
- Future Business Leaders of America (FBLA)

YOUR FUTURE BEGINS HERE!

# CLUSTER: FINANCE

YOUR FUTURE BEGINS HERE!

# CLUSTER: MARKETING

## PROGRAM:

### FINANCE

Description: This program is for students who are interested in pursuing careers in finance. Courses provide an overview of career opportunities, which are available in every sector of the economy and requires individuals working in finance to have strong computational, analytical, and interpersonal skills and effective use of technology.

#### Course Offerings:

- Accounting
- Advanced Accounting
- Banking & Financial Services
- Insurance Services
- College Accounting
- CTE Lab - Finance

#### Career Tech Student Organization:

Future Business Leaders of America (FBLA)



### SCHOOL(S)

Brewbaker Technology Magnet High School

Jefferson Davis High School

Lanier High School

Lee High School



### CAREER READINESS INDICATOR(S)

Intuit Quickbooks Certified User



### SCHOOL(S)

Carver High School

Jefferson Davis High School

Lanier High School

Lee High School

Park Crossing High School



### CAREER READINESS INDICATOR(S)

Microsoft Office Specialist (MOS)

IC3 Global Standard 6

Certified Guest Service Professional

## PROGRAM:

### MARKETING

Description: This program prepares high school students for careers in the field of marketing. Rigorous instruction is provided to equip learners with knowledge and skills for college and career readiness. Extended learning experiences to enrich and enhance instruction is reinforced through learner participation in career and technical student organizations (DECA and FBLA)

#### Course Offerings:

- Business Technology Applications
- Business Essentials
- Marketing Principles
- Management Principles
- Sports & Entertainment Marketing Fundamentals
- Advanced Sports & Entertainment Marketing Fundamentals

#### Career Tech Student Organization:

- DECA
- Future Business Leaders of America (FBLA)

YOUR FUTURE BEGINS HERE!

# CLUSTER: EDUCATION AND TRAINING

YOUR FUTURE BEGINS HERE!

# CLUSTER: GOVERNMENT AND PUBLIC ADMINISTRATION

## PROGRAM:

### TEACHING AND TRAINING

Description: This program provides students with knowledge and skills needed for teaching and professional training consultant careers. Courses provide an overview of teaching and learning theories, curriculum development, teaching techniques, instructional resources, the use of technology, types of assessments, classroom management strategies; and ethics and professionalism.

#### Course Offerings:

- Education & Training
- Teaching I
- Teaching II
- Education & Training Internship
- Senior Career Pathway Project - Education & Training

#### Career Tech Student Organization:

- Family, Career and Community Leaders of America (FCCLA)



### SCHOOL(S)

Jefferson Davis High School



### CAREER READINESS INDICATOR(S)

None at this time



### SCHOOL(S)

Lee High School

Park Crossing High School



### CAREER READINESS INDICATOR(S)

Air Force JROTC Certificate

## PROGRAM:

### AIR FORCE JROTC

Description: The objectives of Air Force JROTC are to educate and train high school cadets in citizenship, promote community service, instill responsibility, character, and self-discipline, and provide instruction in air and space fundamentals.

#### Course Offerings:

- Air Force JROTC Leadership & Aviation History
- Air Force JROTC Leadership & Science of Flight
- Air Force JROTC Leadership & Exploration of Space
- Air Force JROTC Leadership & Cultural Studies

#### Career Tech Student Organization:

JROTC

YOUR FUTURE BEGINS HERE!

# CLUSTER: GOVERNMENT AND PUBLIC ADMINISTRATION

YOUR FUTURE BEGINS HERE!

# CLUSTER: GOVERNMENT AND PUBLIC ADMINISTRATION

## PROGRAM: ARMY JROTC

Description: The objectives of Army JROTC program are to prepare Cadets for leadership roles while making them aware of their rights, responsibilities, and privileges as American citizens. The program provides instruction and opportunities to benefit the student, community, and nation.

### Course Offerings:

- Army JROTC Leadership & Training (LET I)
- Army JROTC Leadership & Training (LET II)
- Army JROTC Leadership & Training (LET III)
- Army JROTC Leadership & Training (LET IV)

### Career Tech Student Organization:

JROTC



### SCHOOL(S)

Carver High School  
Lanier High School



### CAREER READINESS INDICATOR(S)

Army JROTC Certificate



### SCHOOL(S)

Jefferson Davis High School



### CAREER READINESS INDICATOR(S)

Marine Corps JROTC Certificate

## PROGRAM: MARINE CORPS JROTC

Description: The objectives of the Marine Corps JROTC program is to instill a value of citizenship, service to the United States, personal responsibility, and a sense of accomplishment.

### Course Offerings:

- Marine Corps JROTC Leadership Education (LE-1)
- Marine Corps JROTC Leadership Education (LE-2)
- Marine Corps JROTC Leadership Education (LE-3)
- Marine Corps JROTC Leadership Education (LE-4)

### Career Tech Student Organization:

JROTC

YOUR FUTURE BEGINS HERE!

# CLUSTER: HEALTH SCIENCE

## PROGRAM: HEALTH SCIENCE

Description: The Health Science Program instructional content incorporates project-and-problem-based healthcare practices and procedures to demonstrate knowledge and skills fundamental to a variety of healthcare careers. Knowledge and skills are reinforced and enhanced through participation in Career Technical Student Organizations and work-based learning opportunities that are age and grade appropriate.

### Course Offerings:

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

### Career Tech Student Organization:

HOSA - Future Health Professionals

YOUR FUTURE BEGINS HERE!

# CLUSTER: HEALTH SCIENCE

## PROGRAM:

### PROJECT LEAD THE WAY (PLTW) BIOMEDICAL SCIENCE

Description: The PLTW Biomedical Science program curriculum allows students to investigate the roles of biomedical professionals as they study the concepts of human medicine, physiology, genetics, microbiology, and public health. Knowledge and skills are reinforced and enhanced through participation in Career Technical Student Organizations and project-based learning opportunities that are age and grade appropriate.

### Course Offerings:

- Principles of Biomedical Science (PLTW)
- Human Body Systems (PLTW)
- Medical Interventions (PLTW)
- Biomedical Innovations (PLTW)

### Career Tech Student Organization:

HOSA - Future Health Professionals



### SCHOOL(S)

Brewbaker Technology Magnet High School

Jeff Davis High School

MPACT



### CAREER READINESS INDICATOR(S)

Certified Patient Care Technician

BLS Instructor



### SCHOOL(S)

Brewbaker Technology Magnet High School



### CAREER READINESS INDICATOR(S)

Certified Patient Care Technician

YOUR FUTURE BEGINS HERE!

# CLUSTER: HOSPITALITY AND TOURISM

## PROGRAM:

### RESTAURANT, FOOD & BEVERAGE SERVICES

Description: This program begins with the fundamentals and principles of the art of cooking, management and production skills, and techniques. Within this program, students can pursue a national sanitation certification, industry certification, articulation credit, and scholarships. The courses offered involve a commercial laboratory-based instructional setting and internship hours.

#### Course Offerings:

- Hospitality & Tourism
- Event Planning
- Entrepreneurship in FACS
- Culinary Arts I
- Culinary Arts II
- CTE Lab - Hospitality & Tourism

#### Career Tech Student Organization:

Family, Career and Community Leaders of America (FCCLA)



#### SCHOOL(S)

Carver High School



#### CAREER READINESS INDICATOR(S)

ServSafe Manager



#### SCHOOL(S)

Jeff Davis High School

Lee High School



#### CAREER READINESS INDICATOR(S)

ServSafe Manager

YOUR FUTURE BEGINS HERE!

# CLUSTER: HUMAN SERVICES

## PROGRAM:

### FOOD, WELLNESS AND DIETETICS

Description: The Human Services program is ideal for students who are interested in pursuing careers in nutrition, wellness, and health and disease prevention. Courses provide students with knowledge in event planning; photographic styling applications; social media and digital design techniques; developing and adapting food products for marketing and specific nutrition needs; meal planning; food safety; and the scientific investigation of production, processing, preparation, evaluation, and utilization of food.

#### Course Offerings:

- Event Planning
- Family & Consumer Science
- Food & Nutrition
- Entrepreneurship in FACS

#### Career Tech Student Organization:

Family, Career and Community Leaders of America (FCCLA)

YOUR FUTURE BEGINS HERE!

# CLUSTER: INFORMATION TECHNOLOGY

YOUR FUTURE BEGINS HERE!

# CLUSTER: LAW, PUBLIC SAFETY, CORRECTIONS AND SECURITY

## PROGRAM:

### NETWORK SYSTEMS AND COMPUTER SERVICES

Description: 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 network and systems administration.

#### Course Offerings:

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

#### Career Tech Student Organization:

SkillsUSA



### SCHOOL(S)

Brewbaker Technology Magnet High School

Lee High School

MPACT



### CAREER READINESS INDICATOR(S)

TestOut Network Pro  
 TestOut Security Pro  
 TestOut PC Pro  
 TestOut Routing Pro  
 TestOut Switching Pro



### SCHOOL(S)

MPACT



### CAREER READINESS INDICATOR(S)

National Fire Protection Association – Standard NFPA 1001

## PROGRAM:

### EMERGENCY & FIRE MANAGEMENT SERVICES

Description: 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 application of firefighting techniques, 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 hazardous material operations, product control and personal protective equipment. Students who successfully 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



YOUR FUTURE BEGINS HERE!

# CLUSTER: LAW, PUBLIC SAFETY, CORRECTIONS AND SECURITY

YOUR FUTURE BEGINS HERE!

# CLUSTER: LAW, PUBLIC SAFETY, CORRECTIONS AND SECURITY

## PROGRAM:

### LAW ENFORCEMENT SERVICES

Description: 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 emergency situations. 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



### SCHOOL(S)

MPACT



### CAREER READINESS INDICATOR(S)

APCO Public Safety Telecommunicator I



### SCHOOL(S)

BTW



### CAREER READINESS INDICATOR(S)

Accredited Legal Professional (ALP)

## PROGRAM:

### LEGAL SERVICES

Description: This program provides students with knowledge and skills needed for legal service and criminal justice careers. Courses are designed to develop workplace readiness skills in this area of study, including ethics and professionalism, constitutional and criminal laws, the court system, trial processes, juvenile justice and correctional systems, and human diversity. Students learn fundamental aspects of career opportunities, history and development of law, sources of law in society, civil law, criminal law and procedure, ethics and the justice system, reasoning skills, trial procedures, and communication and research skills.

#### Course Offerings:

- Introduction to Law & The American System
- Introduction to Criminal Justice
- Fundamentals of Legal Services
- CTE Lab Law, Public Safety, Corrections & Security
- Senior Career Pathway Project - Law, Public Safety, Corrections & Security
- Introduction to Law & American Legal System

#### Career Tech Student Organization:

SkillsUSA

YOUR FUTURE BEGINS HERE!

# CLUSTER: MANUFACTURING

## PROGRAM:

### MODERN MANUFACTURING

Description: Modern Manufacturing is a CTE program designed to give 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 the Region 5 manufacturing industry for this program.

#### Course Offerings:

- Workforce Essentials (Includes NCCER Core)
- Manufacturing 2
- Manufacturing 3
- CTE Lab – Manufacturing
- Senior Career Pathway Project – Manufacturing

#### Career Tech Student Organization:

SkillsUSA

YOUR FUTURE BEGINS HERE!

# CLUSTER: MANUFACTURING

## PROGRAM:

### INDUSTRIAL SYSTEMS AND MAINTENANCE – MECHANICAL

Description: Industrial maintenance is divided into two distinct pathways, electrical & instrumentation and mechanical. Industrial maintenance technicians are needed in every industry that uses machinery, from automotive assembly plants to computer manufacturers. Not only do they repair and maintain electrical instruments and equipment, but they also install and dismantle them. Every time a new appliance leaves a factory, or a new car rolls off the line, a skilled industrial maintenance technician played a role in producing it. This program utilizes NCCER curriculum and covers topics such as Fasteners and Anchors, Process Mathematics, Pneumatic Controls, Oxyfuel Cutting, Introduction to Piping Components, and Laser Alignment.

#### Course Offerings:

- Architecture, Construction, and Manufacturing
- NCCER Industrial Maintenance - Mechanical 1
- NCCER Industrial Maintenance - Mechanical 2
- NCCER Industrial Maintenance - Mechanical 3
- Safety and Health Regulations
- CTE Lab - Manufacturing

#### Career Tech Student Organization:

SkillsUSA



#### SCHOOL(S)

MPACT



#### CAREER READINESS INDICATOR(S)

NCCER Core

MSSC Certified Production Technical



#### SCHOOL(S)

MPACT



#### CAREER READINESS INDICATOR(S)

NCCER Core

YOUR FUTURE BEGINS HERE!

# CLUSTER: SCIENCE TECHNOLOGY ENGINEERING & MATHEMATICS (STEM)

YOUR FUTURE BEGINS HERE!

# CLUSTER: SCIENCE TECHNOLOGY ENGINEERING & MATHEMATICS (STEM)

## PROGRAM: ENGINEERING

Description: The CTE STEM curriculum should emphasize the integration of academics. To achieve the solution to a given problem, students must possess an adequate foundation in communication skills for reading, writing, speaking, listening, viewing, and presenting; knowledge and skills in mathematics, science, and social studies; and knowledge of current and emerging technologies.

### Course Offerings:

- Foundations of Engineering & Technology
- Applications of Engineering & Technology
- Robotics Systems
- Computer & Engineering Technology
- Senior Career Pathway Project - STEM

### Career Tech Student Organization:

SkillsUSA



### SCHOOL(S)

Brewbaker Technology Magnet High School



### CAREER READINESS INDICATOR(S)

Autodesk-AutoCad Certified User

Autodesk-Inventor Certified User



### SCHOOL(S)

Brewbaker Technology Magnet High School



### CAREER READINESS INDICATOR(S)

Autodesk-AutoCAD Certified User

## PROGRAM:

### PROJECT LEAD THE WAY (PLTW) ENGINEERING

Description: From launching space explorations to delivering safe, clean water to communities, engineers find solutions to pressing problems and turn their ideas into reality. PLTW Engineering empowers students to step into the role of an engineer, adopt a problem-solving mindset, and make the leap from dreamers to doers. The program's courses engage students in compelling, real-world challenges that help them become better collaborators and thinkers. Students take from the courses in-demand knowledge and skills they will use in high school and for the rest of their lives, on any career path they take.

### Course Offerings:

- Engineering Essentials - PLTW
- Introduction to Engineering Design - PLTW
- Principles of Engineering - PLTW

### Career Tech Student Organization:

SkillsUSA

YOUR FUTURE BEGINS HERE!

# LIST OF HIGH SCHOOL PROGRAMS

BTW	BREWTECH	CARVER	JEFF DAVIS
Legal Services	Advertising Design	Business Management	Business Management
	Drafting Design	Restaurant, Food & Beverage Services	Food, Wellness & Dietetics
	Finance	JROTC- Army	Finance
	Health Science	Marketing	Health Science
	Information Technology	Work Based Learning	JROTC- Marines
	PLTW Biomedical		Marketing
	PLTW Engineering		Teaching & Training
	Science Technology Engineering & Math		Work Based Learning
	Work Based Learning		

YOUR FUTURE BEGINS HERE!

# LIST OF HIGH SCHOOL PROGRAMS

LANIER	LEE	MPACT	PARK CROSSING
Finance	Business Management	Advertising Design	Marketing
JROTC-Army	Finance	Building Construction	JROTC-Air Force
Marketing	Food, Wellness, & Dietetics	Electrical	Plant Science
Work Based Learning	Information Technology	Emergency & Fire Management Services	Work Based Learning
	JROTC-Air Force	Health Science	
	Marketing	HVAC	
	Work Based Learning	Industrial Maintenance	
		Information Technology	
		JAG	
		Law Enforcement	
		Welding	
		Modern Manufacturing	

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# MIDDLE SCHOOL PROGRAMS

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# MIDDLE SCHOOL PROGRAMS

## PROGRAM:

### BUSINESS MIDDLE

Description: Rigorous instruction is provided to equip learners with knowledge and skills for college and career readiness. Extended learning experiences to enrich and enhance instruction is reinforced through learner participation in career and technical student organizations.

#### Course Offerings:

- Computer Essentials
- We Build It Better

#### Career Tech Student Organization:

FBLA



## SCHOOL(S)

- Bellingrath Middle
- Brewbaker Middle
- Capitol Heights Middle
- Carr Middle
- Floyd Middle Magnet
- Goodwyn Middle
- McKee Middle
- Southlawn Middle



## SCHOOL(S)

- Floyd Middle Magnet

## PROGRAM:

### PROJECT LEAD THE WAY (PLTW) - MEDICAL DETECTIVES

Description: Project Lead the Way (PLTW) students play the role of real-life medical detectives as they collect and analyze medical data to diagnose disease. They solve medical mysteries through hands-on projects and labs, measure and interpret vital signs, examine nervous system structure and function, investigate disease outbreaks, and explore how a breakdown within the human body can lead to dysfunction.

#### Course Offerings:

- Medical Detectives

#### Career Tech Student Organization:

HOSA - Future Health Professionals

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# JOBS FOR ALABAMA'S GRADUATES (JAG)

## PROGRAM:

### JOBS FOR ALABAMA'S GRADUATES

Description: 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 mentors, 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 including classroom instruction, counseling, employability skills development, and job placement services results in a graduate with a quality job or enrollment in a 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



### SCHOOL(S)

MPACT

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# 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 successful completion of 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 it 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 courses and Career and Technical Education courses in accordance with 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.

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# **WORK-BASED LEARNING**

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Work-Based Learning allows students to participate in supervised, work-based training, internships or apprenticeships for high school credit. The Work-Based Coordinator and local business partners develop individualized student training plans to develop specific skills. Juniors and Seniors enrolled in this course are given the opportunity to receive school-based and work-based training, earn income, reinforce and apply academic competencies, develop, demonstrate and refine safe work habits.

For more information about work-based learning, contact your guidance counselor.



## YOUR FUTURE



**BEGINS HERE!**

**MR. TODD E. DAVIS,  
DIRECTOR**

—  
[todd.davis@mps.k12.al.us](mailto:todd.davis@mps.k12.al.us)

**DR. MIKKI CRENSHAW,  
EDUCATION SPECIALIST**

—  
[mikki.crenshaw@mps.k12.al.us](mailto:mikki.crenshaw@mps.k12.al.us)

**MRS. YULANDER THORNTON,  
EDUCATION SPECIALIST**

—  
[yulander.thornton@mps.k12.al.us](mailto:yulander.thornton@mps.k12.al.us)

**MS. ALESIA RUFFIN,  
CAREER COACH**

—  
[alesia.ruffin@mps.k12.al.us](mailto:alesia.ruffin@mps.k12.al.us)

**MRS. KATRINA H. SMITH,  
CAREER COACH**

—  
[katrina.h.smith@mps.k12.al.us](mailto:katrina.h.smith@mps.k12.al.us)

**MRS. AUBURN BROWN,  
BOOKKEEPER**

—  
[auburn.brown@mps.k12.al.us](mailto:auburn.brown@mps.k12.al.us)

2901 E. South Boulevard  
Montgomery, AL 36116  
334.223.7901  
[www.mps.k12.al.us](http://www.mps.k12.al.us)