Autauga County

Technology

Center

"A College and Career Center"

Course Description Booklet

2020-2021

The Autauga County Technology Center
is accredited by the
Southern Association of Colleges and Schools.

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EQUAL EDUCATION OPPORTUNITY STATEMENT

It is the policy of the Autauga County Board of Education that no student shall be excluded from participation in, be denied the benefits of, or be subjected to discrimination in any program or activity on the basis of sex, age, marital status, race, religion, belief, national origin, ethnic group, disability, immigrant status, non-English speaking ability, homeless status, or migrant status and provides equal access to the Boy Scouts and other designated youth groups.

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The Autauga County Technology Center

The Autauga County Technology Center (ACTC) is a college and career preparatory center. The ACTC offers a diverse curriculum designed to prepare students for entry into the workforce or for further study in the postsecondary setting. The course of study offers courses that provide rigor and relevance for students by linking school-based learning with career-related experiences. Autauga County's Career and Technical Education program follows the state adopted Career and Technical Education Program and is representative of the national Career and Technical Educational model. This model includes sixteen career clusters. These clusters include courses that identify academic and technical knowledge and skills needed for students to pursue a wide range of career opportunities. Twelve of the sixteen national clusters are offered at the ACTC.

These clusters include:

1. Agriculture, Food and Natural Resources
2. Architecture and Construction
3. Business, Management, and Administration
4. Education and Training
5. Finance
6. Health Science
7. Human Services
    - Cosmetology
    - Family and Consumer Science
8. Information Technology
9. Law, Public Safety, Corrections & Security
10. Manufacturing
11. Science, Technology, Engineering, and Mathematics
12. Transportation, Distribution, and Logistics

Table of Contents

Courses in this course description book are not offered EVERY year as this book is a list of PROGRAMS available at ACTC. Please refer to the base school registration form to find courses available for the current school year.

COURSE DESCRIPTIONS BY PROGRAM

Agriconstruction

Agriscience (420009)

Fee: $25 ..... Grades: 9-12

A course that provides students with a general overview of the Agriculture, Food and Natural Resources cluster, which contains five pathways—Power, Structure, and Technical Systems; Environmental and Natural Resources Systems; Animal Systems; Plant Systems; and Agribusiness Systems. Students are involved in classroom and laboratory activities in each of the five pathway areas. Topics included in this course include career opportunities, safety, technology applications, agribusiness leadership, environmental science, soil science, plant science, forestry, animal science, aquaculture, wildlife science, pest management, woodworking, metalworking, small engines, electrical wiring, and plumbing.

This course encourages critical thinking, use of the scientific method, integration of technology, development of student leadership skills, and application of knowledge and skills related to practical questions and problems. Safety concepts are integrated into instruction to the maximum extent possible.
PREREQUISITE: None

Construction Framing (410007)

Fee: $25 ..... Grades: 9-12

A one-credit course designed to provide students with an understanding of the framing phase of a structure, including framing components. Topics include career opportunities, safety, lumber, material estimation, floor systems, wall framing, ceiling framing, stair construction, roof framing, and roof materials in various structures.

Teachers are encouraged to expand the curriculum beyond the limits of these content standards to accommodate specific community interests and utilize local resources. This course encourages critical thinking, use of the scientific method, integration of technology, development of student leadership skills, and application of knowledge and skills related to practical questions and problems. Safety concepts are integrated into instruction to the maximum extent possible.
PREREQUISITE: None

Construction Site Preparation and Foundations (410006)

Fee: $25……Grades: 9-12

Construction Site Preparation and Foundations is a one-credit course designed to facilitate student understanding of the first phases of construction, including types of structures and their uses. Topics include career opportunities, safety, planning, location, layout, concrete and masonry, and foundations of various structures.
PREREQUISITE: None

Construction Finishing and Interior Systems (410008)

Fee: $25 ..... Grades: 9-12

A one-credit course designed to facilitate student understanding of the finishing phase of a structure. Students become familiar with the exterior and interior finishing of a structure. Topics include career opportunities, safety, windows, doors, plumbing, electrical wiring, insulation, wall coverings, storage, and finishes.

Content standards for this course are not intended to serve as the entire curriculum. Teachers are encouraged to expand the curriculum beyond the limits of these content standards to accommodate specific community interests and utilize local resources. This course encourages critical thinking, use of the scientific method, integration of technology, development of student leadership skills, and application of knowledge and skills related to practical questions and problems. Safety concepts are integrated into instruction to the maximum extent possible.
PREREQUISITE: None

A typical sequence for Agriconstruction courses:

1. *Agrisicence*
2. *Construction Site Preparation & Foundations*
3. *Construction Framing*
4. *Construction Finishing & Interior Systems*

Introduction to Veterinary Science may be taken at any time, but typically after Agrisicence.

Introduction to Veterinary Science (410003)

Fee: $25……Grades: 9-12

A one-credit course designed to provide students with an introduction to the veterinary science profession. Topics include career opportunities, safety, humane treatment, laws and regulations, anatomy and physiology, animal health, and veterinary services.

This course encourages critical thinking, use of the scientific method, integration of technology, development of student leadership skills, and application of knowledge and skills related to practical questions and problems. Safety concepts are integrated into instruction to the maximum extent possible.
PREREQUISITE: NONE

Architecture and Construction

A typical sequence for Welding courses:

1. First Year: NCCER Welding I
2. Second Year: NCCER Welding II
3. Third Year: Dual Enrollment Welding I & II (or III & IV)
4. Fourth Year: Dual Enrollment Welding III & IV (or I & II)

Dual Enrollment Welding I (938601) WDT 108

Fee: NONE.....Grades: 10-12

This one-credit course provides the student with instruction on safety practices and terminology in the Shielded Metal Arc Welding (SMAW) process. Emphasis is placed on safety, welding terminology, equipment identification, set-up and operation, and related information in the SMAW process. This course also covers the rules of basic safety and identification of shop equipment and provides the student with the skills and knowledge necessary for the safe operation of oxy-fuel cutting.
PREREQUISITE: meet admission requirements to Central Alabama Community College

Dual Enrollment Welding II (938602) WDT 109

Fee: NONE.....Grades: 10-12

This one-credit course provides the student with instruction on safety practices and terminology in the Shielded Metal Arc Welding (SMAW) process. Emphasis is placed on safety, welding terminology, equipment identification, set-up and operation, and related information in the SMAW process. This course also covers the rules of basic safety and identification of shop equipment and provides the student with the skills and knowledge necessary for the safe operation of carbon arc cutting and plasma arc cutting.
PREREQUISITE: meet admission requirements to Central Alabama Community College

Dual Enrollment Welding III (938608) WDT 122

Fee: NONE.....Grades: 10-12

This one-credit course is designed introduce the student to the proper set-up and operation of the shielded metal arc welding equipment. Emphasis is placed on striking and controlling the arc, and proper fit up of fillet joints. This course is also designed to instruct students in the safe operation of oxy-fuel cutting. Upon completion, students should be able to make fillet welds in all positions using electrodes in the F-3 groups in accordance applicable welding code and be able to safely operate oxy-fuel equipment and perform those operations as per the applicable welding code.
PREREQUISITE: meet admission requirements to Central Alabama Community College

Dual Enrollment Welding IV (93609) WDT 123

Fee: NONE.....Grades: 10-12

This one-credit course is designed introduce the student to the proper set-up and operation of the shielded metal arc welding equipment. Emphasis is placed on striking

and controlling the arc, and proper fit up of fillet joints. This course is also designed to instruct students in the safe operation of plasma arc and carbon arc cutting. Upon completion, students should be able to make fillet welds in all positions using electrodes in the F-4 groups in accordance with applicable welding code and be able to safely operate plasma arc and carbon arc equipment and perform those operations as per applicable welding code.
PREREQUISITE: meet admission requirements to Central Alabama Community College

Dual Enrollment Welding requires one class period. Each class meets for one semester. Classes are offered on alternating years. Students may take all four classes over a two-year period.

NCCER Welding 1 (432901)

Fee: $50 ..... Grades: 10-12

This is the first of four required one-credit courses in the Welding Technologies Pathway. It is designed to complete all core requirements for NCCER Core Credentialing and to provide students with fundamental knowledge and skills emphasizing use of hand tools, power tools, welding theory and practices, which are utilized in the manufacturing and construction industry. This entry-level course is required for NCCER Welding Level I Credentialing and may be taken as one of the optional technical courses with credit applied to the Industrial Maintenance Technology area.
PREREQUISITE: None

NCCER Welding 2 (432902)

Fee: $50 ..... Grades: 10-12

This is the second of four required one-credit courses in the welding Technologies pathway. Topics include: basic shielded metal arc welding, blueprint reading, weld symbols, joint identification, and print reading. Emphasis is placed on fundamental knowledge, guided practice, and NCCER Welding Level I requirements
PREREQUISITE: NCCER Welding 1

*NCCER Welding 3 **(432903)***

Fee: $25..... Grades: 11-12

This is the third of four required one-credit courses in the welding technologies pathway. Topics include Air Carbon Arc Cutting and Gouging, SMAW- groove welds with backing, SMAW Open V Groove Welds, etc.
PREREQUISITE: NCCER Welding 1 & 2

*NCCER Welding 4 **(432904)***

Fee: $25..... Grades: 11-12

This is the fourth of four required one-credit courses in the welding technologies pathway. Topics include Open V Groove Welds, Reading Welding Detail Drawings, GMAW & FCAW Plate, etc.

Additional Dual Enrollment Welding courses:

SHIELDED METAL ARC WELDING GROOVE ***(938607) WDT 120***

Fee: NONE.....Grades: 10-12

This course provides the student with instruction on joint design, joint preparation, and fit-up of groove welds in accordance with applicable welding codes. Emphasis is placed on safe operation, joint design, joint preparation, and fit-up. Upon completion, students should be able to identify the proper joint design, joint preparation and fit-up of groove welds in accordance with applicable welding codes.

PREREQUISITE: meet admission requirements to Central Alabama Community College

SHIELDED METAL ARC WELDING GROOVE LAB ***(938611) WDT 125***

Fee: NONE.....Grades: 10-12

This course provides instruction and demonstrations in the shielded metal arc welding process on carbon steel plate with various size F3 and F4 group electrodes in all positions. Emphasis is placed on welding groove joints and using various F3 and F4 group electrodes in all positions. Upon completion, the student should be able to make visually acceptable groove weld joints in accordance with applicable welding codes.

PREREQUISITE: meet admission requirements to Central Alabama Community College

NCCER CORE ***(938806) WKO 110***

Fee: NONE.....Grades: 10-12

This course is designed to provide students with knowledge and skills related to multi-craft technicians in a variety of fields. Information in this course is based on the National Center for Construction Education and Research (NCCER) core curriculum and prepares students to test for the NCCER credential.

PREREQUISITE: meet admission requirements to Central Alabama Community College

INDUSTRIAL BLUEPRINT READING ***(938603) WDT 110***

Fee: NONE.....Grades: 10-12

This course provides students with the understanding and fundamentals of industrial blueprint reading. Emphasis is placed on reading and interpreting lines, views, dimensions, weld joint configurations and weld symbols. Upon completion students should be able to interpret welding symbols and blueprints as they apply to welding and fabrication.

PREREQUISITE: meet admission requirements to Central Alabama Community College

GAS METAL ARC/FLUX FORED ARC WELDING ***(938606) WDT 119***

Fee: NONE.....Grades: 10-12

This course introduces the student to the gas metal arc and flux cored arc welding process. Emphasis is placed on safe operating practices, handling and storage of compressed gasses, process principles, component identification, various welding techniques and base and filler metal identification.

PREREQUISITE: meet admission requirements to Central Alabama Community College

GAS METAL ARC/FLUX CORED ARC WELDING LAB ***(938610) WDT 124***

Fee: NONE.....Grades: 10-12

This course provides instruction and demonstration using the various transfer methods and techniques to gas metal arc and flux cored arc welds. Topics included are safety, equipment set-up, joint design and preparation, and gases.

PREREQUISITE: meet admission requirements to Central Alabama Community College

INTERMEDIATE COMPUTER AIDED DRAFTING AND DESIGN ***(927011) DDT 127***

Fee: NONE.....Grades: 10-12

This course covers intermediate-level concepts and applications of CADD. Emphasis will be placed on intermediate-level features, commands, and applications of CADD software. This is a CORE course.

PREREQUISITE: meet admission requirements to Central Alabama Community College

GAS TUNGSTEN ARC WELDING ***(938627) WDT 228***

Fee: NONE.....Grades: 10-12

This course provides student with knowledge needed to perform gas tungsten arc welds using ferrous and/or non-ferrous metals, according to applicable welding codes. Topics include safe operating practices, equipment identification and set-up, correct selection of tungsten type, polarity, shielding gas and filler metals. Upon completion, a student should be able to identify safe operating practices, equipment identification and setup, correct selection of tungsten type, polarity, shielding gas, filler metals, and various welds on ferrous and/or non-ferrous metals, using the gas tungsten arc welding process according to applicable welding codes.

PREREQUISITE: meet admission requirements to Central Alabama Community College

BASIC 3D MODELING ***(927019) DDT 144***

Fee: NONE.....Grades: 10-12

This course is an introduction to 3D solid modeling techniques utilizing feature-based, constraint-based parametric design. This course encourages the student to visualize parts in the 3D world and have a "design intent" plan for each part in which they will design. Upon completion of the course students should be able to create basic 3D models and 2D working drawings.

PREREQUISITE: meet admission requirements to Central Alabama Community College

NCCER Welding 3 ***(432903)***

Fee: $25.....Grades: 11-12

This is the third of four required one-credit courses in the Welding Technologies pathway. It is designed to provide students with theory, practice, and skills development. Emphasis is placed on application and operation of shielded metal arc welding (SMAW) equipment in the vertical, 3-F and overhead, 4-F positions leading to NCCER Welding Level I Credentialing.

NCCER Welding 4 ***(432904)***

Fee: $25.....Grades: 11-12

This is the fourth of 4 required one-credit courses in the Welding Technologies pathway. It is designed to provide students with additional practice, and skills development. Emphasis is placed on application and operation of shielded metal arc welding (SMAW) equipment and mastery in the vertical, 3-F and overhead, 4-F positions leading to NCCER Welding Level I Credentialing and AWS Plate certification.

Automotive Service

Maintenance and Light Repair A-D (570071, 570072, 570073, 570074)

Fee: $25 ..... Grades: 9-12

Maintenance and Light Repair A (570071)
Maintenance and Light Repair B (570072)
Maintenance and Light Repair C (570073)
Maintenance and Light Repair D (570074)

One-credit courses designed to provide students with foundational knowledge and skills relative to:

A: safety, engine repair, automatic transmissions, and manual drive trains.
B: safety, suspension and steering, and brakes.
C: safety, brakes, and electrical/electronic systems.
D: safety, engine performance, electrical/electronic systems, and heating and air conditioning.

*Automotive Service Technology A **(570075)***

Fee: $25.....Grades: 11-12

A one-credit course that provides students with service knowledge and skills relative to safety, engine repair, automatic transmissions, and manual drive trains.

*Automotive Service Technology B **(570076)***

Fee: $25.....Grades: 11-12

A one-credit course that provides students with service knowledge and skills relative to safety, suspension and steering, and brakes.

*Automotive Service Technology C **(570077)***

Fee: $25.....Grades: 11-12

A one-credit course that provides students with service knowledge and skills relative to safety, brakes, and electrical/electronic systems.

*Automotive Service Technology D **(570078)***

Fee: $25.....Grades: 11-12

A one-credit course that provides students with service knowledge and skills relative to safety, engine performance, electrical/electronic systems, and heating and air conditioning.

*Dual Enrollment Fundamentals of Automotive Technology **(922201) ASE 101***

Fee: NONE.....Grades: 10-12

This course provides basic instruction in Fundamentals of Automotive Technology.

PREREQUISITE: meet admission requirements to Trenholm State Community College

Dual Enrollment Braking Systems (922203) ASE 121

Fee: NONE.....Grades: 10-12

This one-credit course provides instruction in automotive technology or auto mechanics. Emphasis is placed on the practical application of brakes. This is a CORE course.

PREREQUISITE: meet admission requirements to Trenholm State Community College

Dual Enrollment Steering and Suspension (922204) ASE 122

Fee: NONE.....Grades: 10-12

This one-credit course provides instruction in automotive technology or auto mechanics. Emphasis is placed on the practical application of steering and suspension. This is a CORE course.
PREREQUISITE: meet admission requirements to Trenholm State Community College

Dual Enrollment Automotive Engines (922205) ASE 124

Fee: NONE.....Grades: 10-12

This course provides instruction on the operation, design, and superficial repair of automotive engines. Emphasis is placed on understanding the four stroke cycle, intake and exhaust manifolds and related parts, engine mechanical timing components, engine cooling and lubrication system principles and repairs, and basic fuel and ignition operation. This is a CORE course.
PREREQUISITE: meet admission requirements to Trenholm State Community College

Dual Enrollment Drive Train and Axles (922606) ASE 130

Fee: NONE.....Grades: 10-12

This course provides basic instruction in automotive drive trains and axles. Emphasis is placed on the understanding and application of basic internal and external operation relating to proper operation and driveability. This is a CORE course.
PREREQUISITE: meet admission requirements to Trenholm State Community College

Dual Enrollment Advanced Automotive Engines (9922611) ASE 220

Fee: NONE.....Grades: 10-12

This course provides in-depth instruction concerning internal engine diagnosis, overhaul and repair, including but not necessarily limited to the replacement of timing chains, belts, and gears, as well as the replacement or reconditioning of valve train components as well as replacement of pistons, connecting rods, piston rings, bearings, lubrication system components, gaskets, and oil seals.
PREREQUISITE: meet admission requirements to Trenholm State Community College

Dual Enrollment Manual Transmission/Transaxle (9922213) ASE 224

Fee: NONE.....Grades: 10-12

This course covers basic instruction in manual transmission and transaxles. Emphasis is placed on the understanding and application of basic internal and external operation relating to proper operation and driveability.
PREREQUISITE: meet admission requirements to Trenholm State Community College

Business Management and Administration

Business Technology Applications/Microsoft IT Academy (450006)

Fee: $25 ..... Grades: 9-12

A one-credit foundation course designed to assist students in developing technological proficiencies in word processing, spreadsheets, databases, presentations, communications, Internet use, ethics, and careers using technology applications. Simulations and projects promoting teamwork, leadership, and workplace skills offer further opportunities for application of knowledge and skills. Applications covered: Word, Excel, Access, and PowerPoint. Microsoft Office Certifications are offered for Microsoft Word, Excel, and PowerPoint.
PREREQUISITE: None

Work-Based Learning (400122, 400133, 400144, 400212)

Fee: NONE..... Grades: 11-12

Designed to provide students with the opportunity to connect knowledge and skills obtained in the classroom with those obtained in an occupational setting. Students will develop a portfolio of academic, technological occupational and work-readiness skills. Skills obtained through this course lead to the availability of a better-trained labor pool, addressing critical business and industry demands within our geographical area. In order to receive one credit for the class students must work 140 hours per year; for two credits 280 hours per year. Hours may be obtained through (apprenticeship) paid work experience or (internship) unpaid work experience. *The Cooperative Education Work-Based Learning (WBL) program is supervised by an ACTC Coordinator.*

Students may enroll in one WBL class (7th period) or two WBL classes (6th & 7th periods). Students are required to leave campus during these periods. Students are required to have transportation from school to work.

PREREQUISITE: Must apply and have PRIOR approval of a WBL Coordinator. Must maintain employment in order to remain in the course.

LOSS OF EMPLOYMENT WILL RESULT IN SCHEDULE CHANGE AND LOSS OF CREDIT FOR ONE or TWO CLASSES.

400122 Work-Based Experience-First Credit
400133 Work-Based Experience-Second Credit
400144 Work-Based Experience-Third Credit
400212 Work-Based Experience-Fourth Credit

Law in Society (410023)

Fee: $25 ..... Grades: 9-12

A one-credit course designed to acquaint students with basic legal principles and foundations of law common to business and personal activities. This course is an

overview of criminal, civil, contract, employment, bankruptcy, real estate, and family & consumer law. Simulations and projects such as evaluating contracts, debating legal issues and mock trials promote teamwork, leadership and workplace skills that will further opportunities for applications of knowledge and skills.
PREREQUISITE: None

Multimedia Design (410016)

Fee: $25 ..... Grades: 9-12

A one-credit course designed to provide students with hands-on skills involving graphic design, digital photography, Web publishing, and digital video production. Students use various hardware peripherals and software for completing documents.
PREREQUISITE: Business Technology Applications

Workforce Essentials (400016)

Fee: $30 ..... Grades: 9-12

A one-credit course that provides students with higher-level academic and occupational skills that are transferable across jobs and occupational areas. Emphasis is placed on academic foundations for careers, applied technology, career development and employment, entrepreneurship and business economics, social and ethical responsibility, leadership, and teamwork, safety and health, and technical knowledge and skills. Students build on prior knowledge, strengths, interests, and needs that enhance preparation for future employment and continuing education and training.
PREREQUISITE: None

Cosmetology

Students enrolling in Cosmetology courses must have two class periods available. Students earn one credit in the fall and one credit in the spring.

A typical sequence for Cosmetology courses:

1. First Year: Introduction to Cosmetology and Natural Hairstyling Practicum
2. Second Year: Salon Practices & Management and Chemical Services

Introduction to Cosmetology (510060)

Fee: $50 ..... Grades: 10-12

A one-credit course that provides students with a study of concepts related to the cosmetology profession. Specific topics include cosmetology history and opportunities, professional image, infection control, fundamentals and principles of hair care and design. Students also gain initial practical experience in sanitation, shampooing, hair shaping, and hairstyling. Upon successful completion of this course, students are able to practice safety and sanitary precautions as they perform basic cosmetology procedures. Introduction to Cosmetology is the prerequisite to Chemical Services, Hair Coloring, Introduction to Spa Techniques, Advanced Spa Technique Applications, Salon Practices and Management, and State Board Practicum.
PREREQUISITE: None

Natural Hairstyling Practicum (510076)

Fee: $50 ..... Grades: 10-12

A one-credit course designed to provide instruction on natural hair care services and techniques for styling and grooming natural hair. Core domain service areas include work area and client preparation, set-up of supplies, safe work practices, procedures related to services and design, and blood exposure procedure.
PREREQUISITE: Introduction to Cosmetology

Salon Practices and Management (510065)

Fee: $50 ..... Grades: 11-12

A one-credit course that enables students to develop entry-level management skills for the cosmetology industry. Students practice all phases of cosmetology in a salon setting. Upon successful completion of this course, students are able to demonstrate professional work ethics and communication skills, job-seeking and management skills, and exhibit knowledge of the technology used in salons. The prerequisite for this course is Introduction to Cosmetology.
PREREQUISITE: None

Chemical Services (510062)

Fee: $50 ..... Grades: 11-12

A one-credit course that focuses on the theory of chemical services related to chemical hair texturing. Specific topics include basics of chemistry and electricity, properties of the hair and scalp, and chemical texture services. Students also gain initial practical experience in performing various chemical texturing activities. Emphasis on safety, chemical use and handling, hair and scalp analysis, and client consultation. Upon successful completion of this course, students are able to practice safety and sanitary precautions as they perform these chemical services.
PREREQUISITE: None

Hair Coloring (510061)

Fee: $50 ..... Grades: 10-12

A one-credit course that provides students with study and experience in hair coloring and lightening. Emphasis is placed on color application, laws, levels and classifications of color, and problem solving. Upon successful completion of this course, students are able to identify all phases of hair coloring and its effects upon the hair and perform procedures for hair coloring and lightening. Problem-solving and critical-thinking skills are essential, and many opportunities are provided for student growth in level of competence.
PREREQUISITE: Introduction to Cosmetology

Dual Enrollment Automotive Service

Note: These Dual Enrollment classes are pending final approval.

Braking Systems (922203) ASE 121

Fee: NONE.....Grades: 10-12

This one-credit course provides instruction in automotive technology or auto mechanics. Emphasis is placed on the practical application of brakes. This is a CORE course.
PREREQUISITE: meet admission requirements to Trenholm State Community College

Steering and Suspension (922204) ASE 122

Fee: NONE.....Grades: 10-12

Emphasis is placed on the practical application of steering and suspension. This is a CORE course.
PREREQUISITE: meet admission requirements to Trenholm State Community College

Dual Enrollment Electronics

Note: These Dual Enrollment classes are pending final approval.

Dual Enrollment DC Fundamentals (931625) ILT 160

Fee: NONE.....Grades: 10-12

This course is designed to provide students with a working knowledge of basic direct current (DC) electrical principles. Topics include safety, basic atomic structure and theory, magnetism, conductors, insulators, use of Ohm's law to solve for voltage, current, and resistance, electrical sources, power, inductors, and capacitors. Students will perform lockout/tagout procedures, troubleshoot circuits and analyze series, parallel, and combination DC circuits using the electrical laws and basic testing equipment to determine unknown electrical quantities.
PREREQUISITE: meet admission requirements to Central Alabama Community College

MSSC Safety Course (943179) WKO 131

Fee: NONE.....Grades: 10-12

This course is designed to provide students with knowledge and skills related to safety in a manufacturing environment. Topics include: safety in a manufacturing environment, safety and environmental inspections, emergency drills, identifying and correcting unsafe work conditions, orienting employees to safety procedures and equipment use, fulfilling safety and health requirements for maintenance, installation, and repair, monitoring safe equipment and operator performance, and utilizing effective safety-enhancing workplace practices. NOTE: This course is in support of the MSSC Certified Technician credential.
PREREQUISITE: meet admission requirements to Central Alabama Community College

MSSC Quality Practices and Measurement Course (943180) WKO 132

Fee: NONE.....Grades: 10-12

This course is designed to provide students with knowledge and skills related to safety in a manufacturing environment. Topics include: internal quality and audit activities, calibrating gages and other data collection equipment, continuous improvement, inspection and documentation, and reporting processes, corrective actions, fundamentals of blueprint reading, common measurement systems, and precision measurement tools. NOTE: This course is in support of the MSSC Certified Technician credential.

PREREQUISITE: meet admission requirements to Central Alabama Community College

MSSC Manufacturing Processes and Production Course (943181) WKO 133

Fee: NONE.....Grades: 10-12

This course is designed to provide students with knowledge and skills related to safety in a manufacturing environment. Topics include: identifying customer needs, determining resources available, setting up equipment for the production process, setting team production goals, making job assignments, coordinating work flow, communicating production and material requirements, monitoring processes, documenting production compliance, and preparing product for shipping and distribution. NOTE: This course is in support of the MSSC Certified Technician credential.

PREREQUISITE: meet admission requirements to Central Alabama Community College

MSSC Maintenance Awareness Course (943182) WKO 134

Fee: NONE.....Grades: 10-12

This course is designed to provide students with knowledge and skills related to safety in a manufacturing environment. Topics include: Preparing preventative and routine maintenance and repair, monitoring indicators, housekeeping, and recognizing potential maintenance issues related to various production systems and equipment. Note: This course is in support of the MSSC Certified Technician credential.

PREREQUISITE: meet admission requirements to Central Alabama Community College

Digital Fundamentals (931628) ILT 163

Fee: NONE.....Grades: 10-12

This course provides instruction on basic logic gates, flip-flops, registers, counters, microprocessor/computer fundamentals, analog to digital conversion, and digital analog conversion. Emphasis is placed on number systems, Boolean algebra, combination logic circuits, sequential logic circuits, and typical microprocessor data manipulation and storage. This course also has an embedded lab with exercises designed to develop

skills required by industry. Upon completion, students should be able to analyze digital circuits, draw timing diagrams, determine output of combinational and sequential logic circuits and diagnose and troubleshoot electronic components as well as demonstrate knowledge of microprocessor and computer circuits.
PREREQUISITE: meet admission requirements to Central Alabama Community College

CIRCUIT FABRICATION I (931629) ILT 164

Fee: NONE.....Grades: 10-12

This course provides instruction in fabrication of functional circuits and is an introduction to device construction and fabrication. Utilizing discrete components, students will fabricate functional circuits. Topics include soldering, cable construction, coaxial cable connection and termination, component mounting, cases, and chassis, printed circuit board design, layout, fabrication, and repair, as well as soldering techniques, care of tools, wire splicing, wire wrapping, connector maintenance, and related shop safety. Upon completion of this course, students should be able to perform basic circuit and project construction.
PREREQUISITE: meet admission requirements to Central Alabama Community College

AC FUNDAMENTALS (931626) ILT 161

Fee: NONE.....Grades: 10-12

This course is designed to provide students with a working knowledge of basic alternating current (AC) electrical principles. Topics include basic concepts of electricity, electrical components, basic circuits, measurement instruments, the laws of alternating current, and electrical safety with lockout procedures. Hands on laboratory exercises are provided to analyze various series, parallel, and combination alternating current circuit configurations containing resistors, inductors, and capacitors. Upon course completion, students will be able to describe and explain alternating current circuit fundamentals such as RLC circuits, impedance, phase relationships, and power factors. They should also be able to perform fundamental tasks associated with troubleshooting, repairing, and maintaining industrial AC systems.
PREREQUISITE: meet admission requirements to Central Alabama Community College

SOLID STATE FUNDAMENTALS (931627) ILT 162

Fee: NONE.....Grades: 10-12

This course provides instruction in basic solid state theory beginning with atomic structure and including devices such as diodes, bipolar transistors, field effect transistors, amplifiers, thyristors, operational amplifiers, oscillator and power supply circuits. Emphasis is placed on the practical application of solid-state devices, proper biasing and amplifier circuit analysis and the use of test equipment to diagnose, troubleshoot and repair typical solid-state device circuits. This course also provides the

opportunity for students to apply the solid-state principles and theories learned in class in the laboratory setting. Emphasis is placed on the practical application of solid-state devices, proper biasing and amplifier circuit analysis and the use of test equipment to diagnose, troubleshoot and repair typical solid-state device circuits.
PREREQUISITE: meet admission requirements to Central Alabama Community College

Dual Enrollment Construction Wiring (931615) ILT 118

Fee: NONE.....Grades: 10-12

This course provides a study of the technical skills required to safely perform electrical wiring installations. Topics include methods of wiring residential, commercial, and industrial locations. Upon completion, students should be able to apply safe wiring skills to residential, commercial and industrial applications. (Central Alabama Community College: ILT 118)
PREREQUISITE: meet admission requirements to Central Alabama Community College

Dual Enrollment Motor Controls (931648) ILT 209

Fee: NONE.....Grades: 10-12

This course is a study of the construction, operating characteristics, and installation of different motor control circuits and devices. Emphasis is placed on the control of three phase AC motors. This course covers the use of motor control symbols, magnetic motor starters, running overload protection, pushbutton stations, multiple control stations, two wire control, three wire control, jogging control, sequence control, and ladder diagrams of motor control circuits. Upon completion, students should be able to understand the operation of motor starters, overload protection, interpret ladder diagrams using pushbutton stations and understand complex motor control diagrams. (Central Alabama Community College: ILT 209)
PREREQUISITE: meet admission requirements to Central Alabama Community College

Dual Enrollment HVAC

Principles of Electricity (920206) ACR 121

Fee: NONE.....Grades: 10-12

This course is designed to provide the student with the basic knowledge of electrical theory and circuitry as it pertains to air conditioning and refrigeration. This course emphasizes safety, definitions, symbols, laws, circuits, and electrical test instruments. Upon completion students should understand and be able to apply the basic principles of HVACR circuits and circuit components. This is a CORE course.
PREREQUISITE: meet admission requirements to Trenholm State Community College

Principles of Refrigeration (920201) ACR 111

Fee: NONE.....Grades: 10-12

This course emphasizes the fundamental principles for air conditioning and refrigeration. Instruction is provided in the theory and principles of refrigeration and heat transfer, HVAC/R system components, common, and specialty tools for HVAC/R, and application of the concepts of basic compression refrigeration. Upon completion, students should identify system components and understand their functions, identify and use common and specialty HVAC/R tools, and maintain components of a basic compression refrigeration system. This is a CORE course.
PREREQUISITE: meet admission requirements to Trenholm State Community College

Heat Load Calculations (920212) ACR 128

Fee: NONE.....Grades: 10-12

This course focuses on heat flow into and out of building structures. Emphasis is placed on determining heat gain/heat loss of a given structure. Upon completion, students should be able to calculate heat load and determine HVAC equipment size requirements.
PREREQUISITE: meet admission requirements to Trenholm State Community College

Refrigerant Transition and Recovery (920221) ACR 147

Fee: NONE.....Grades: 10-12

This course is EPA-approved and covers material relating to the requirements necessary for type I, II, and III universal certifications. Upon completion, students should be prepared to take the EPA 608 certification examination.
PREREQUISITE: meet admission requirements to Trenholm State Community College

Dual Enrollment Welding

Dual Enrollment Welding I (938601) WDT 108

Fee: NONE.....Grades: 10-12
This course provides the student with instruction on safety practices and terminology in the Shielded Metal Arc Welding (SMAW) process. Emphasis is placed on safety, welding terminology, equipment identification, set-up and operation, and related information in the SMAW process. This course also covers the rules of basic safety and identification of shop equipment and provides the student with the skills and knowledge necessary for the safe operation of oxy-fuel cutting.
PREREQUISITE: meet admission requirements to Central Alabama Community College

Dual Enrollment Welding II (938602) WDT 109

Fee: NONE.....Grades: 10-12

This course provides the student with instruction on safety practices and terminology in the Shielded Metal Arc Welding (SMAW) process. Emphasis is placed on safety, welding terminology, equipment identification, set-up and operation, and related information in the SMAW process. This course also covers the rules of basic safety and

identification of shop equipment and provides the student with the skills and knowledge necessary for the safe operation of carbon arc cutting and plasma arc cutting.
PREREQUISITE: Dual Enrollment I

Dual Enrollment Welding III (938608) WDT 122

Fee: NONE.....Grades: 10-12

This one-credit course is designed introduce the student to the proper set-up and operation of the shielded metal arc welding equipment. Emphasis is placed on striking and controlling the arc, and proper fit up of fillet joints. This course is also designed to instruct students in the safe operation of oxy-fuel cutting. Upon completion, students should be able to make fillet welds in all positions using electrodes in the F-3 groups in accordance applicable welding code and be able to safely operate oxy-fuel equipment and perform those operations as per the applicable welding code.
PREREQUISITE: meet admission requirements to Central Alabama Community College

Dual Enrollment Welding IV (93609) WDT 123

Fee: NONE.....Grades: 10-12

This one-credit course is designed introduce the student to the proper set-up and operation of the shielded metal arc welding equipment. Emphasis is placed on striking and controlling the arc, and proper fit up of fillet joints. This course is also designed to instruct students in the safe operation of plasma arc and carbon arc cutting. Upon completion, students should be able to make fillet welds in all positions using electrodes in the F-4 groups in accordance with applicable welding code and be able to safely operate plasma arc and carbon arc equipment and perform those operations as per applicable welding code.
PREREQUISITE: meet admission requirements to Central Alabama Community College

Dual Enrollment Welding requires one class period. Each class meets for one semester. Classes are offered on alternating years Students may take all four classes over a two-year period.

Education and Training

Education and Training (460009)

Fee: $25 .....Grades: 10-12

A one-credit course and the prerequisite for all pathways included in the Education and Training cluster. The course is designed for students who are interested in pursuing careers in education. Course content includes the organizational structure of education, careers, the role of the teacher, characteristics of effective teachers, communication skills, the teaching and learning processes, learning styles, research, characteristics of positive classroom environments, human growth and development, curriculum development, student characteristics, teaching techniques, learning activities, educational initiatives, technology, and careers. Observational experiences are a required component of this course.
PREREQUISITE: Application required

Early Childhood Education I (0460013)

Fee: $25 ..... Grades: 11-12

A one-credit course. The prerequisite for this course is Education and Training. Course content is designed to help students learn ways to direct and operate an early childhood education program. Major topics include organizational structure; personnel policies, rules, and regulations; liability issues; principles of human growth and development; human development theories; observation techniques; interpersonal skills for promoting positive and productive relationships with children and their families; developmentally appropriate activities; individual and group activities; organization of teaching materials and supplies; learning activity centers; lesson plans; smooth transitions between routines and activities; teaching aides; operating equipment; play and recreational activities; dietary needs of children; preparation of snacks and meals; child health and safety; parental involvement; community resources; technology; and careers. An early childhood education facility with children is required and essential for students to develop skills in teaching children.
PREREQUISITE: Education and Training and ACCESS TO TRANSPORTATION

Teaching I (460011)

Fee: $25 ..... Grades: 11-12

A one-credit course and the prerequisite for this course is Education and Training. Content includes information to help students implement the teaching and learning processes. Major topics are funding sources, budget preparations, legal aspects, research, teaching and learning theories, curriculum development, positive learning environments, creative teaching techniques, appropriate learning activities, instructional resources, community resources and services, scope and sequence charts, course outlines, lesson plans, testing, grading, developing partnerships, technology, and careers. School-based laboratory experiences are essential for students to develop skills in teaching. Observational experiences are a required component of this course.
PREREQUISITE: Education and Training and ACCESS TO TRANSPORTATION

Early Childhood Education II (460014)

Fee: $25 ..... Grades: 12

A one-credit course. The prerequisite for this course is Early Childhood Education I. The course provides students with advanced knowledge and skills used in the field of education. Major topics include the impact of caregivers on the development of children, personnel tasks and responsibilities, legal issues and liability, licensure standards, policies for providing early childhood education programs, physical facility layout, management systems, facility maintenance, scheduling, child growth and development theories, brain research, risk management, factors contributing to at-risk children, observation records, guidance techniques, curriculum development, age-appropriate learning activities, children with exceptionalities, motivational techniques, special events and field trips, recreational activities, dietary needs of children, food choices, professionalism, health screening and health assessment, emergency evacuation procedures, rules and regulations, technology, and careers. An early childhood

education facility is required and essential for students to develop skills in teaching children.
PREREQUISITE: Early Childhood Education I and ACCESS TO TRANSPORTATION

Teaching II (460012)

Fee: $25 ..... Grades: 12

A one-credit course. Content provides students with advanced knowledge and skills used in the education field. Concepts of legal aspects of education, instructional resources, motivation, types of assessments, constructing texts, positive learning environments, lesson planning and teaching for various areas and grades, reading level of instructional materials, classroom management strategies, partnerships, public relations, professional associations, technology, and careers are included in the course. Observational experiences are a required component of this course.
PREREQUISITE: Teaching I and ACCESS TO TRANSPORTATION

Electronics

Direct Current (430058)

Fee: $25 ..... Grades: 9-12

This one-credit course is designed to provide students with the fundamental knowledge and skills for this area of the electrical industry. Emphasis is placed on job safety, sources, terminology and symbols, components of a basic circuit, electrical quantities and measurements, characteristics of resistors, Ohm's law in direct current circuits, circuit construction, and troubleshooting. Upon successful completion of this course, students perform basic tasks related to the electrical industry.

Alternating Current (430059)

Fee: $25 ..... Grades: 9-12

This one-credit course is designed to provide students with the fundamental knowledge and skills needed in the electrical industry. Emphasis is placed on job safety, terminology and symbols, magnetism, electrical quantities, Ohm's law in alternating current circuits, and reactive circuits. Upon successful completion of this course, students are able to perform basic tasks related to the electrical industry.
PREREQUISITE: Direct Current

Digital Electronics (540021)

Fee: $25 ..... Grades: 9-12

This one-credit course is designed to provide students with the fundamental knowledge and skills for this area of the electrical industry. Emphasis is placed on job safety, characteristics of digital circuit signals, logic gates, logic devices, and digital circuits.

Upon successful completion of this course, students perform basic tasks related to the electrical industry.

Electronics & Control Systems (560114)

Fee: $25 ..... Grades: 9-12

This one-credit course is designed to provide students with the fundamental knowledge and skills for this area of the electrical industry. Emphasis is placed on job safety, electronic control systems, programmable logic controllers, and robotics. Upon successful completion of this course, students perform basic tasks related to the electrical industry.

Introduction to Robotics (540031)

Fee: $25 ..... Grades: 9-12

A one-credit course designed to provide students with the fundamental knowledge and skills of robotics. Emphasis is placed on fundamentals of electrical current, digital circuits, electronic control systems, and the design and operation of robotic systems.
PREREQUISITE: Algebra I

Dual Enrollment Construction Wiring (931614) ILT 118

.....Grades: 10-12

This course provides a study of the technical skills required to safely perform electrical wiring installations. Topics include methods of wiring residential, commercial, and industrial locations. Upon completion, students should be able to apply safe wiring skills to residential, commercial and industrial applications. (Central Alabama Community College: ILT 118)
PREREQUISITE: meet admission requirements to Central Alabama Community College

Dual Enrollment Motor Controls (931640) ILT 209

.....Grades: 10-12
This course is a study of the construction, operating characteristics, and installation of different motor control circuits and devices. Emphasis is placed on the control of three phase AC motors. This course covers the use of motor control symbols, magnetic motor starters, running overload protection, pushbutton stations, multiple control stations, two wire control, three wire control, jogging control, sequence control, and ladder diagrams of motor control circuits. Upon completion, students should be able to understand the operation of motor starters, overload protection, interpret ladder diagrams using pushbutton stations and understand complex motor control diagrams. (Central Alabama Community College: ILT 209)
PREREQUISITE: meet admission requirements to Central Alabama Community College

Family and Consumer Sciences

Family and Consumer Sciences (510004)

Fee: $25 ..... Grades: 9-12

A one-credit course that serves as the foundation course for the Human Services cluster, except for the Personal Care Services pathway. Course content provides opportunities for students to explore the core content included in the Family Studies and Consumer Sciences; Early Childhood Development and Services; Fashion; Interior Design; Food, Wellness, and Dietetics; and Consumer Sciences pathways. Major topics are marriage and family life, parenting and caregiving, consumer services, apparel, housing, food and nutrition, and technology and careers. This course is not a prerequisite for courses included in all pathways within the cluster; however, students are encouraged to take the course before entering a pathway.
PREREQUISITE: None

Entrepreneurship in FACS (510008)

Fee: $25 ..... Grades: 9-12

A one-credit course that teaches the skills needed to own and operate a business. Have you ever dreamed about owning your own business, being your own boss, or turning a talent or ability into a career opportunity? Have you created a unique idea for a product or service that you wish could become a reality, especially if you could earn money from it? If this sounds like you, then sign up for Entrepreneurship in FACS! You will learn the steps necessary to start a business and be on the pathway to success in an area that truly interests you. Topics include financial planning, employee management, owner rights and responsibilities, and communication techniques. Students are prepared to create and manage their own Family and Consumer Science business or embark on a career related to business development. Class projects develop entrepreneurial skills by providing insight into manufacturing products and offering services.
PREREQUISITE: Food & Nutrition, Dietetics, Family & Consumer Science, or Event Planning

Event Planning (500015)

Fee: $25 ..... Grades: 9-12

This is a one-credit course taught in grades 9-12. Students will learn to organize and plan all aspects of business and social events including the food, location, and décor associated with hiring an event planner. Concepts taught in the course to meet the needs of clients include planning for the event with activities, establishing a budget, determining the theme, planning the guest list, determining the location, developing an event plan schedule, planning transportation needs, training of staff, staging the event, calculating room and space requirements, providing necessary technology and equipment, planning food and beverage services, securing entertainment, understanding legal issues in event planning, and conducting post-evaluations of event. Students demonstrate leadership characteristics and make decisions based on integrating knowledge of financial, human resources, promotion, and event management principals. Students are prepared for various career opportunities in event planning.
PREREQUISITE: Food & Nutrition

Dietetics (510014)

Fee: $25 ..... Grades: 10-12

A one-credit course that provides students with advanced knowledge and skills used in nutrition and dietetics. Major topics include nutrition, meal planning, safety, food science, and professional behavior. This course is offered on alternating years.
PREREQUISITE: Food & Nutrition (or previously enrolled in a Family and Consumer Science class)

Food and Nutrition (510011)

Fee: $25 ..... Grades: 10-12

A one-credit-or half-credit course. Topics include the impact of daily nutrition and wellness practices on long-term health and wellness; physical, social, and psychological aspects of healthy nutrition and wellness choices; selection and preparation of nutritious meals and snacks based on United States Department of Agriculture (USDA) Dietary Guidelines and Food Guide Pyramid; safety, sanitation, storage, and recycling processes and issues associated with nutrition and wellness; impacts of science and technology on nutrition and wellness issues; and nutrition and wellness career paths.
PREREQUISITE: None

Sports Nutrition (510017)

Fee: $25 ..... Grades: 10-12

A one-credit course designed for students interested in health, fitness, and sports performance. This course examines the relationship between nutrition, physical performance, and overall wellness. Students will learn how to choose nutritious foods for healthy lifestyles and peak performance of athletes. Health and disease prevention through nutrition, physical activity, and wellness practices are essential components of the course. This course emphasizes the metabolic process and management of food choices for optimal health and physical performance. Students are challenge to develop personal fitness and nutrition plans. This course is offered on alternating years.
PREREQUISITE: Family and Consumer Science

Finance

Accounting (470012)

Fee: $25 ..... Grades: 9-12

A one-credit course designed to help students understand the basic principles of the accounting cycle. This course provides a comprehensive introduction to basic financial accounting, including analyzing and recording business transactions, preparing and interpreting financial statements, demonstrating generally accepted accounting principles, and performing banking and payroll activities.
PREREQUISITE: None

Financial Management (470021)

Fee: $25 ..... Grades: 9-12

A one-credit course designed to provide students with an overview of financial and investment planning procedures. Students interpret financial data to develop short- and long-term budgetary plans, produce accurate reports, and make informed business decisions. Students develop product knowledge related to financial and investment planning by examining characteristics for distinguishing among stocks, bonds, and commodities and between insurance and annuity products.
PREREQUISITE: None

Emergency and Fire Management Services

Principles of Public Service (530004)

Fee: $25 ..... Grades: 9-12

A one-credit course designed to introduce students to the competencies related to public service job preparatory programs. Students develop knowledge and skills in fire management services, legal services, and law enforcement services. This course is offered on alternating years.
PREREQUISITE: None

Emergency Services (410024)

Fee: $25 ..... Grades: 10-12

A one-credit course that introduces students to the emergency medical profession. Course content emphasizes safety, human structure and function, assessment of emergency clients, ethical behavior, and emergency care procedures.
PREREQUISITE: None

Introduction to Fire Science (530011)

Fee: $25 ..... Grades: 10-12

A one-credit course designed to introduce students to the basic principles and procedures of fire fighting. Emphasis is placed on safety, fire behavior, communication equipment, fire extinguishers, structural design, personal protective equipment, ropes and knots, search and rescue, ground ladders, ventilation, fundamentals of a water supply system, fire hose, and water streams.
PREREQUISITE: None

Fire Fighting (530012)

Fee: $25 ..... Grades: 10-12

A one-credit course designed to provide students with instruction in techniques of fire fighting. Emphasis is placed on safety, fire prevention and control, hazardous materials, sprinkler systems, first responder, and public relations.
PREREQUISITE: Introduction to Fire Science; Physical Required by Physician

Senior Career Pathway Project- Law, Public Safety, Corrections & Security (530024)

Fee: $25 ..... Grade: 12

A one-credit course designed for senior students who have completed a minimum of two career and technical education courses to select an area of interest; engage in in-depth exploration of the area; employ problem-solving, decision-making, and independent learning skills; and present a culminating pathway project before a selected audience.
PREREQUISITE: Fire Science; Physical Required by Physician

Health Science

Foundations of Health Science (490007)

Fee: $25 ..... Grades: 10-12

A required one-credit course that introduces students to a wide range of health careers. Integrated academics combined with health care knowledge and skills provide the framework for a strong health care delivery system in the twenty-first century. This course is the prerequisite for all the health science courses. It is recommended for students who want to prepare for further study in an array of health-related fields at the postsecondary level.
PREREQUISITE: None

Patient Care Technician (490027)

Fee: $25 ..... Grades: 11-12

A one-credit course that provides students the opportunity to become effective and efficient multi-skilled healthcare providers. Students will develop a working knowledge of advanced patient care skills, vital signs, 12-lead ECG/EKG's, oxygen therapy, basic phlebotomy via simulation, and specimen collection and processing.

Essential workforce skills and safety will be emphasized, as well as, professional ethics and legal responsibilities. Students will ascertain employability skills and soft skills required by business and industry. Upon successful completion of required theory, lab, and simulation, students may be eligible to sit for Patient Care Technician Certification and EKG Certification.
PREREQUISITE: Foundations of Health Science

Medical Coding (490035)

Fee: $25 ..... Grades: 11-12

A one-credit course that is designed for students to gain knowledge about basic principles of coding and clinical classification systems. Students will study reimbursement methodologies, health records and data, health information

requirements and standards, patient confidentiality, privacy, legal, and ethical issues. The course uses an integrated approach for teaching coding competencies by incorporating theory, lab, and application of skills. Students may be eligible to take a national certification exam in medical coding and medical administration assistant. Eligibility is based on individual certification agency requirements.
PREREQUISITE: Foundations of Health Science

Medical Terminology (490033)

Fee: $25 ..... Grades: 10-12

A one-credit course that is designed for students to develop health care specific knowledge for a career in the medical field. The course uses an integrated approach for teaching the language of medicine to the health care student by incorporating medical terminology with anatomy and physiology and the disease process. This method has been proven to be a logical and effective method of learning the language of medicine.
PREREQUISITE: Foundations of Health Science

Health Science Internship (490013)

Fee: $80 ..... Grades: 12

A two-credit course designed for students in Grade 12. This course provides students with the knowledge and skills necessary for becoming a health care worker or for preparing students for postsecondary health care education programs. Health Science Internship is designed to be completed in a hospital, extended care facility, rehabilitation center, medical office, imagery laboratory, or other health care facility.
PREREQUISITE: Foundations of Health Science; Recommendation from Instructors, and access to transportation.
Recommended prerequisites: Anatomy & Physiology

Dual Enrollment HVAC

Principles of Electricity (920206) ACR 121

Fee: NONE ..... Grades: 10-12

This course is designed to provide the student with the basic knowledge of electrical theory and circuitry as it pertains to air conditioning and refrigeration. This course emphasizes safety, definitions, symbols, laws, circuits, and electrical test instruments. Upon completion students should understand and be able to apply the basic principles of HVACR circuits and circuit components. This is a CORE course.
PREREQUISITE: meet admission requirements to Trenholm State Community College

Principles of Refrigeration (920201) ACR 111

Fee: NONE ..... Grades: 10-12

This course emphasizes the fundamental principles for air conditioning and refrigeration. Instruction is provided in the theory and principles of refrigeration and heat transfer, HVAC/R system components, common, and specialty tools for HVAC/R, and application of the concepts of basic compression refrigeration. Upon completion, students should identify system components and understand their functions, identify and use common and specialty HVAC/R tools, and maintain components of a basic compression refrigeration system. This is a CORE course.
PREREQUISITE: meet admission requirements to Trenholm State Community College

Heat Load Calculations (920212) ACR 128

Fee: NONE.....Grades: 10-12

This course focuses on heat flow into and out of building structures. Emphasis is placed on determining heat gain/heat loss of a given structure. Upon completion, students should be able to calculate heat load and determine HVAC equipment size requirements.
PREREQUISITE: meet admission requirements to Trenholm State Community College

Refrigerant Transition and Recovery (920221) ACR 147

Fee: NONE.....Grades: 10-12

This course is EPA-approved and covers material relating to the requirements necessary for type I, II, and III universal certifications. Upon completion, students should be prepared to take the EPA 608 certification examination.
PREREQUISITE: meet admission requirements to Trenholm State Community College

Information Technology

Information Technology Fundamentals (520005)

Fee: $25 ..... Grades: 9-12

A one-credit course that introduces students to the knowledge base and technical skills for information technology careers. Students study the nature of business and demonstrate knowledge of the functions of information systems in business. Emphasis is placed on maintaining a safe working environment and on building interpersonal skills needed for working in the information technology environment. Students demonstrate appropriate knowledge and behaviors regarding legal responsibilities of information technology professionals. They explore a variety of information technology career opportunities and develop a personal career plan to meet career goals and objectives. Students have the opportunity to take the TestOut PC Pro certification exam and the C-Tech Copper Cabling certification.
PREREQUISITE: NONE

Networking I (520021)

Fee: $25 ..... Grades: 10-12

A one-credit course designed to provide students with skills involving a hands-on, career-oriented approach to learning networking that includes practical experiences. This course includes activities that emphasize the application of networking in terms of implementation and career opportunities.
Students have the opportunity to take the TestOut Network Pro certification exam and the C-Tech Fiber certification.
PREREQUISITE: Information Technology Fundamentals

Networking II (520022)

Fee: $25 ..... Grades: 11-12

A one-credit course designed to provide students with skills involving hands-on learning by installing a router, configuring a server, and performing disaster recovery. This course includes a strong emphasis on proper safety practices and industry ethics. Students have the opportunity to take the TestOut Security Pro certification exam.
PREREQUISITE: Networking I

Networking III (520023)

Fee: $25 ..... Grades: 11-12

Networking III is a one-credit course designed to provide students with skills needed to perform routing and switching in an enterprise network. Students configure a switch with virtual local area networks (VLANs) and inter-switch communication. Students perform troubleshooting using a structured methodology.
PREREQUISITE: Networking II

Science, Technology, Engineering and Mathematics (STEM)

Introduction to Engineering Design (560015)

Fee: $35 ..... Grades: 9-12

A one-credit, capstone course in the engineering field recommended for students in Grades 11–12. The course enables students to make an informed career choice through the study and application of mechanical, electrical, and other engineering systems. Students conduct research and design engineering projects to enhance abilities and expand interest in the field of engineering. Projects reinforce the application of communication, mathematics, and science. Computer technology applications are utilized extensively in this course to enable students to visualize, model, prototype, solve, and report comprehensive design problems.
PREREQUISITE: None

Principles of Engineering (560016)

Fee: $35 ..... Grades: 10-12

A one-credit course designed to explore the application of engineering principles in various technological areas including construction, transportation, communication,

manufacturing, and bioengineering. Students gain knowledge and experience needed to effectively improve processes and systems in each of these areas.
PREREQUISITE: Introduction to Engineering

Computer Integrated Manufacturing (560021)

Fee: $35 ..... Grades: 10-12

A one-credit course designed to enhance computer modeling skills by applying principles of robotics and automation to the creation of models of three-dimensional designs.
PREREQUISITE: Introduction to Engineering Design

Engineering Design and Development (EDD) (560022)

Fee: $45 ..... Grades: 11-12

Engineering Design and Development (EDD) is a one-credit course designed for 12th grade students. EDD is the capstone course in the PLTW high school engineering program. Students perform research to select, define and justify a problem. It is an open-ended engineering research course in which students work to design and develop an original solution to a well-defined and justified open-ended problem by applying an engineering design process.
PREREQUISITE: Principles of Engineering & Computer Integrated Manufacturing

The following Career and Technology courses are offered at their respective schools:

Autaugaville School

Business Technology Applications (450006)

Fee: $25 ..... Grades: 9-12

A one-credit foundation course designed to assist students in developing technological proficiencies in word processing, spreadsheets, databases, presentations, communications, Internet use, ethics, and careers using technology applications. Simulations and projects promoting teamwork, leadership, and workplace skills offer further opportunities for application of knowledge and skills.
Applications covered: Word, Excel, Access, and PowerPoint.
PREREQUISITE: None

Career Cluster Exploration (400001)

Fee: $10 ..... Grade: 7

A 70 instructional-hour course designed for students in Grade 7 to explore career opportunities in the 16 clusters and associated pathways. Emphasis is placed on employability and leadership skills.

Career Cluster Technologies II (400014)

Fee: $10 ..... Grade: 8

A 70 instructional-hour course for students in Grade 8 that provides an in-depth study of the knowledge and processes needed to further increase students' level of technological literacy. Instruction is provided in technologies related to the 16 career clusters and related pathways.

Multimedia Design (410016)

Fee: $25 ..... Grades: 9-12

A one-credit course designed to provide students with hands-on skills involving graphic design, digital photography, Web publishing, and digital video production. Students use various hardware peripherals and software for completing projects. Offered on alternating years.
PREREQUISITE: Business Technology Applications

Financial Management (470021)

Fee: $25 ..... Grades: 9-12

A one-credit course designed to provide students with an overview of financial and investment planning procedures. Students interpret financial data to develop short- and long-term budgetary plans, produce accurate reports, and make informed business decisions. Students develop product knowledge related to financial and investment planning by examining characteristics for distinguishing among stocks, bonds, and commodities and between insurance and annuity products.
PREREQUISITE: None

Work-Based Learning (400122, 400133, 400144, 400212)

Fee: NONE ..... Grades: 11-12

Designed to provide students with the opportunity to connect knowledge and skills obtained in the classroom with those obtained in an occupational setting. Students will develop a portfolio of academic, technological occupational and work-readiness skills. Skills obtained through this course lead to the availability of a better-trained labor pool, addressing critical business and industry demands within our geographical area. In order to receive one credit for the class students must work 140 hours per year; for two credits 280 hours per year. Hours may be obtained through (apprenticeship) paid work experience or (internship) unpaid work experience. *The Cooperative Education Work-Based Learning (WBL) program is supervised by an ACTC Coordinator.*

Students may enroll in one WBL class (7th period) or two WBL classes (6th & 7th periods). Students are required to leave campus during these periods. Students are required to have transportation from school to work.

PREREQUISITE: Must apply and have PRIOR approval of a WBL Coordinator. Must maintain employment in order to remain in the course.

LOSS OF EMPLOYMENT WILL RESULT IN SCHEDULE CHANGE AND LOSS OF CREDIT FOR ONE or TWO CLASSES.

400122 Work-Based Experience-First Credit
400133 Work-Based Experience-Second Credit
400144 Work-Based Experience-Third Credit
400212 Work-Based Experience-Fourth Credit

Billingsley School

Agriscience (420009)

Fee: $25 ..... Grades: 9-12

A course that provides students with a general overview of the Agriculture, Food and Natural Resources cluster, which contains five pathways—Power, Structure, and Technical Systems; Environmental and Natural Resources Systems; Animal Systems; Plant Systems; and Agribusiness Systems. Students are involved in classroom and laboratory activities in each of the five pathway areas. Topics included in this course include career opportunities, safety, technology applications, agribusiness leadership, environmental science, soil science, plant science, forestry, animal science, aquaculture, wildlife science, pest management, woodworking, metalworking, small engines, electrical wiring, and plumbing.

This course encourages critical thinking, use of the scientific method, integration of technology, development of student leadership skills, and application of knowledge and skills related to practical questions and problems. Safety concepts are integrated into instruction to the maximum extent possible.
PREREQUISITE: None

Fundamentals of Agriscience (420101)

Fee: $25 ..... Grades: 9-12

A one credit course that provides students with a fundamental overview of the Agriculture, Food and Natural Resources cluster, which contains five pathways—Power, Structure, and Technical Systems; Environmental and Natural Resources Systems; Animal Systems; Plant Systems; and Agribusiness Systems. Students are involved in classroom and laboratory activities in each of the five pathway areas. The emphasis for Fundamentals of Agriscience is based around the NCCER Core Curriculum including basic safety, construction math, hand tools, power tools, construction drawings, basic rigging, communication skills, employability skills, and materials handling.
PREREQUISITE: None

Intermediate Agriscience (420102)

Fee: $25 ..... Grades: 9-12

A one-credit course that provides students with an intermediate understanding of the Agriculture, Food and Natural Resources cluster, which contains five pathways—Power, Structure, and Technical Systems; Environmental and Natural Resources Systems; Animal Systems; Plant Systems; and Agribusiness Systems. Students are involved in classroom and laboratory activities in each of the five pathway areas. The emphasis for Intermediate Agriscience is plant systems. The curriculum will provide opportunities for credentials utilizing resources from the Alabama Green Industry Training Center and NCCER.
PREREQUISITE: Fundamentals of Agrisicence

Advanced Agriscience (420103)

Fee: $25 ..... Grades: 9-12

A one credit course that provides students with an advanced understanding of the Agriculture, Food and Natural Resources cluster, which contains five pathways—Power, Structure, and Technical Systems; Environmental and Natural Resources Systems; Animal Systems; Plant Systems; and Agribusiness Systems. Students are involved in classroom and laboratory activities in each of the five pathway areas. The emphasis for Advanced Agriscience is animal systems. The curriculum will provide opportunities for credentials utilizing resources from the Alabama Green Industry Training Center, NCCER, and various others.
PREREQUISITE: Intermediate Agriscience

Applied Agricultural Mechanics (420103)

Fee: $25 ..... Grades: 9-12

A one credit course that provides students with an advanced understanding of the Agriculture, Food and Natural Resources cluster, which contains five pathways—Power, Structure, and Technical Systems; Environmental and Natural Resources Systems; Animal Systems; Plant Systems; and Agribusiness Systems. Students are involved in classroom and laboratory activities in each of the five pathway areas. The emphasis for Applied Agricultural Mechanics is construction and power mechanics. Students should be allowed ample time in the laboratory to apply content in real world applications. The curriculum will provide opportunities for credentials utilizing resources from NCCER.

Introduction to Agriscience (420005)

Fee: $25 ..... Grade: 7

A 70 instructional-hour exploratory course that provides an overview of the agricultural industry for students in Grade 7. This course may be offered as a rotation course allowing students to explore various career fields. Specific content standards to be included in each course are indicated in the Course of Study chart.
PREREQUISITE: None

Agriscience Exploration (420007)

Fee: $25 ..... Grade: 8

A 70 instructional-hour exploratory course that provides Grade 8 students the opportunity to gain knowledge and acquire skills in aquaculture; animal, plant, and soil science; ecology; woodworking; electricity; etc. Specific content standards to be included in each course are indicated in the Course of Study chart.
PREREQUISITE: None

Business Management and Administration

Accounting (470012)

Fee: $25 ..... Grades: 9-12

A one-credit course designed to help students understand the basic principles of the accounting cycle. This course provides a comprehensive introduction to basic financial accounting, including analyzing and recording business transactions, preparing a Advanced Accounting

Advanced Accounting (470013)

Fee: $25 ..... Grades: 9-12

Advanced Accounting is a one-credit course designed to provide students with an increased emphasis on accounting principles and techniques for solving business problems and making financial decisions. This course includes adjusting inventory control systems; applying accounting procedures for revenues, expenses, and loans; and enhancing accounting skills. The prerequisite for this course is Accounting. nd interpreting financial statements, demonstrating generally accepted accounting principles, and performing banking and payroll activities.
PREREQUISITE: None

Business Finance (450021)

Fee: $25 ..... Grades: 9-12

Business Finance is a half-credit or one-credit course designed to provide students with an overview of the principles of business finance. The curriculum focuses on major areas of study, including economics, marketing, accounting procedures, and the global financial market. An integral component of the curriculum is the application of decision-making skills that enables students to become more responsible consumers, producers, or business entrepreneurs.

Business Technology Applications (450006)

Fee: $25 ..... Grades: 9-12

A one-credit foundation course designed to assist students in developing technological proficiencies in word processing, spreadsheets, databases, presentations, communications, Internet use, ethics, and careers using technology applications.

Simulations and projects promoting teamwork, leadership, and workplace skills offer further opportunities for application of knowledge and skills.
Applications covered: Word, Excel, Access, and PowerPoint.
PREREQUISITE: None

Computer Essentials (450004)

Fee: $10 ..... Grades: 7-8

A 35 instructional-hour course designed for students in Grades 7 or 8 who want to master basic skills in word processing, database management, spreadsheet applications, multimedia presentations, and Internet research. Specific content standards to be included in each of the courses are indicated in the Course of Study chart.

Multimedia Publications

Fee: $25 ..... Grades: 9-12

A one-credit course designed to provide students with the ability to utilize digital equipment and multimedia digital imaging software, produce interactive media projects, and develop publication layouts. Students use various hardware peripherals as well as the Internet for integrating skills to create a variety of publications.

Workforce Essentials (400016)

Fee: $25 ..... Grades: 9-12

A one-credit course that provides students with higher-level academic and occupational skills that are transferable across jobs and occupational areas. Emphasis is placed on academic foundations for careers, applied technology, career development and employment, entrepreneurship and business economics, social and ethical responsibility, leadership, and teamwork, safety and health, and technical knowledge and skills. Students build on prior knowledge, strengths, interests, and needs that enhance preparation for future employment and continuing education and training.
PREREQUISITE: None

Work-Based Learning (400122, 400133, 400144, 400212)

Fee: NONE ..... Grades: 11-12

Designed to provide students with the opportunity to connect knowledge and skills obtained in the classroom with those obtained in an occupational setting. Students will develop a portfolio of academic, technological occupational and work-readiness skills. Skills obtained through this course lead to the availability of a better-trained labor pool, addressing critical business and industry demands within our geographical area. In order to receive one credit for the class students must work 140 hours per year; for two credits 280 hours per year. Hours may be obtained through (apprenticeship) paid work experience or (internship) unpaid work experience. *The Cooperative Education Work-Based Learning (WBL) program is supervised by an ACTC Coordinator.*

Students may enroll in one WBL class (7th period) or two WBL classes (6th & 7th periods). Students are required to leave campus during these periods. Students are required to have transportation from school to work.

PREREQUISITE: Must apply and have PRIOR approval of a WBL Coordinator. Must maintain employment in order to remain in the course.

LOSS OF EMPLOYMENT WILL RESULT IN SCHEDULE CHANGE AND LOSS OF CREDIT FOR ONE or TWO CLASSES.

400122 Work-Based Experience-First Credit
400133 Work-Based Experience-Second Credit
400144 Work-Based Experience-Third Credit
400212 Work-Based Experience-Fourth Credit

Marbury Middle School

Computer Science Discoveries (520045)

Fee: $10 ..... Grades: 7-8
Computer Science Discoveries is a 9 week course for students in grades 7-8. It takes a wide lens view on computer science by covering topics such as programming, physical computing, HTML/CSS, multimedia design, and data interpretation. Students are empowered to create authentic artifacts and engage with CS as a medium for creativity, communication, problem solving, and fun. The curriculum inspires students as they build their own websites, apps, games, multimedia, and physical computing devices.

Introduction *to Programming* (450012)

Fee: $15 ..... Grade: 8
Introduction to Programming is a 70-hour course for students in Grade 8 to gain an understanding of basic computer programming concepts and logic. Students will be introduced to programming through a variety of projects and object-based programming activities and applications including advanced website design, JavaScript coding, and multimedia design. Students will explore and demonstrate business related skills such as teamwork, interpersonal skills and ethics while completing projects. The suggested prerequisite for this course is Computer Science Discoveries.

Introduction to Cyber Security (520041)

Fee: $25 ..... Grade: 8
Introduction to Cyber Security is a yearlong course and provides students in Grade 8 with a basic understanding of computer structure and functionality, as well as ethics and security concepts, which can be used to further their study/career path in high school and beyond. Students will experience hands-on activities to explore hardware and software components and implement basic computer security principles. Foundational concepts in computer storage, network connectivity, operating systems, and data structures are introduced. Students will participate in the CyberPatriots competition in order to put these skills to use in real world scenarios. Additional topics include: coding concepts and practices; code processing within the computer; examining historical and

emerging technologies; and discovering college and career pathways that are related to information technology and computing. The suggested prerequisite for this course is Computer Science Discoveries

Marbury High School

Plant Systems

Fish and Wildlife Management (420024)

Fee: $25 ..... Grades: 9-12

Fish and Wildlife Management is a course that provides students with the opportunity to gain knowledge regarding the management of natural resources. Topics included in the course are career opportunities, outdoor safety, history, issues, classification, fish and wildlife ecology, fish and wildlife management, endangered species, fish and wildlife pest management, and outdoor recreation.

Content standards for this course are not intended to serve as the entire curriculum. Teachers are encouraged to expand the curriculum beyond the limits of these content standards to accommodate specific community interests and utilize local resources. This course encourages critical thinking, use of the scientific method, integration of technology, development of student leadership skills, and application of knowledge and skills related to practical questions and problems. Safety concepts are integrated into instruction to the maximum extent possible.

Forestry (420020)

Fee: $25 ..... Grades: 9-12

Forestry is a course designed to enable students to become knowledgeable of forestry and wood technology. Students acquire an appreciation for increased emphasis on managing and conserving forests for the future. Topics include career opportunities, safety, history, dendrology, tree measurement, mapping, silviculture, forest products, and forest protection.

Greenhouse Production and Management (420054)

Fee: $25 ..... Grades: 9-12

Greenhouse Production and Management is a one-credit course related to the production of greenhouse crops. Topics include career opportunities, safety, plant propagation, growing media, plant identification, greenhouse production, pest control, business management, and equipment and facilities. The hands-on approach to learning is a key component in this course.

Content standards for this course are not intended to serve as the entire curriculum. Teachers are encouraged to expand the curriculum beyond the limits of these content standards to accommodate specific community interests and utilize local resources.

This course encourages critical thinking, use of the scientific method, integration of technology, development of student leadership skills, and application of knowledge and skills related to practical questions and problems. Safety concepts are integrated into instruction to the maximum extent possible.

Horticulture Science (420051)

Fee: $25 ..... Grades: 9-12

Topics in Horticultural Science include career opportunities, safety, plant physiology, growing media, greenhouse facilities, greenhouse and nursery crop production, plant identification and classification, pest management, hydroponics and vegetable gardening, and technological applications.

Content standards for this course are not intended to serve as the entire curriculum. Teachers are encouraged to expand the curriculum beyond the limits of these content standards to accommodate specific community interests and utilize local resources. This course encourages critical thinking, use of the scientific method, integration of technology, development of student leadership skills, and application of knowledge and skills related to practical questions and problems. Safety concepts are integrated into instruction to the maximum extent possible.

Landscape Design and Management (420057)

Fee: $25 ..... Grades: 9-12

The Landscape Design and Management course allows students to become more knowledgeable about and appreciative of landscape design and management. Topics include career opportunities, safety, landscape design, plant selection, landscape growth and the environment, landscape establishment and management, interior plantscaping and xeriscaping, landscape business management, and technology.

This course encourages critical thinking, use of the scientific method, integration of technology, development of student leadership skills, and application of knowledge and skills related to practical questions and problems. Safety concepts are integrated into instruction to the maximum extent possible.

Sports Turf-Grass Production and Management (420056)

Fee: $25 ..... Grades: 9-12

Sports Turfgrass Production and Management is a one-credit course that prepares students for sports turfgrass careers. Topics include career opportunities, safety, turfgrass growth, turfgrass management, sports fields, turfgrass tools and equipment, business management, and technology.

Content standards for this course are not intended to serve as the entire curriculum. Teachers are encouraged to expand the curriculum beyond these minimum required content standards to accommodate specific community interests and utilize local resources. This course encourages critical thinking, use of the scientific method,

integration of technology, development of student leadership skills, and application of knowledge and skills related to practical questions and problems. Safety concepts are integrated into instruction to the maximum extent possible.

Business Management and Administration

Business Technology Applications (450006)

Fee: $25 ..... Grades: 9-12

A one-credit foundation course designed to assist students in developing technological proficiencies in word processing, spreadsheets, databases, presentations, communications, Internet use, ethics, and careers using technology applications. Simulations and projects promoting teamwork, leadership, and workplace skills offer further opportunities for application of knowledge and skills. Applications covered: Word, Excel, Access, and PowerPoint. Microsoft Office Certifications are offered for Microsoft Word, Excel, and PowerPoint.
PREREQUISITE: None

Law in Society (450011)

Fee: $25 ..... Grades: 9-12

A half-credit course designed to acquaint students with basic legal principles and foundations of law common to business and personal activities. This course is an overview of criminal, civil, contract, employment, bankruptcy, real estate, and family & consumer law. Simulations and projects such as evaluating contracts, debating legal issues and mock trials promote teamwork, leadership and workplace skills that will further opportunities for applications of knowledge and skills.
PREREQUISITE: None

Multimedia Publications

Fee: $25 ..... Grades: 9-12

A one-credit course designed to provide students with the ability to utilize digital equipment and multimedia digital imaging software, produce interactive media projects, and develop publication layouts. Students use various hardware peripherals as well as the Internet for integrating skills to create a variety of publications.

Personal Finance (400022)

Fee: $25 ..... Grades: 9-12

A half-credit course that introduces students to the management of personal and family resources to achieve personal goals and financial literacy. Content provides opportunities for students to explore consumer behavior, laws and legislation, consumer protection, consumer rights and responsibilities, consumer decision making, advertising and promotional techniques, individual and family money management, banking

services, use of credit, income tax, technology, and careers in providing financial services to individuals and families.
PREREQUISITE: None

Information Technology

Information Technology Fundamentals (520005)

Fee: $25 ..... Grades: 9-12

A one-credit course that introduces students to the knowledge base and technical skills for information technology careers. Students study the nature of business and demonstrate knowledge of the functions of information systems in business. Emphasis is placed on maintaining a safe working environment and on building interpersonal skills needed for working in the information technology environment. Students demonstrate appropriate knowledge and behaviors regarding legal responsibilities of information technology professionals. They explore a variety of information technology career opportunities and develop a personal career plan to meet career goals and objectives. Students have the opportunity to take the TestOut PC Pro certification exam.
PREREQUISITE: NONE

Networking I (520021)

Fee: $25 ..... Grades: 10-12

A one-credit course designed to provide students with skills involving a hands-on, career-oriented approach to learning networking that includes practical experiences. This course includes activities that emphasize the application of networking in terms of implementation and career opportunities. Students have the opportunity to take the TestOut Network Pro certification exam.
PREREQUISITE: Information Technology Fundamentals

Work-Based Learning (400122, 400133, 400144, 400212)

Fee: NONE..... Grades: 11-12

Designed to provide students with the opportunity to connect knowledge and skills obtained in the classroom with those obtained in an occupational setting. Students will develop a portfolio of academic, technological occupational and work-readiness skills. Skills obtained through this course lead to the availability of a better-trained labor pool, addressing critical business and industry demands within our geographical area. In order to receive one credit for the class students must work 140 hours per year; for two credits 280 hours per year. Hours may be obtained through (apprenticeship) paid work experience or (internship) unpaid work experience. *The Cooperative Education Work-Based Learning (WBL) program is supervised by an ACTC Coordinator.*

Students may enroll in one WBL class (7th period) or two WBL classes (6th & 7th periods). Students are required to leave campus during these periods. Students are required to have transportation from school to work.

PREREQUISITE: Must apply and have PRIOR approval of a WBL Coordinator. Must maintain employment in order to remain in the course.

LOSS OF EMPLOYMENT WILL RESULT IN SCHEDULE CHANGE AND LOSS OF CREDIT FOR ONE or TWO CLASSES.

400122 Work-Based Experience-First Credit
400133 Work-Based Experience-Second Credit
400144 Work-Based Experience-Third Credit
400212 Work-Based Experience-Fourth Credit

Prattville Junior High School

Career Cluster Exploration (400001)

Fee: $10 ..... Grade: 7

A 70 instructional-hour course designed for students in Grade 7 to explore career opportunities in the 16 clusters and associated pathways. Emphasis is placed on employability and leadership skills.

Computer Essentials (450004)

Fee: $10 ..... Grades: 7-8

A 35 instructional-hour course designed for students in Grades 7 or 8 who want to master basic skills in word processing, database management, spreadsheet applications, multimedia presentations, and Internet research. Specific content standards to be included in each of the courses are indicated in the Course of Study chart.

Career Cluster Technologies II (400014)

Fee: $10 ..... Grade: 8

A 70 instructional-hour course for students in Grade 8 that provides an in-depth study of the knowledge and processes needed to further increase students' level of technological literacy. Instruction is provided in technologies related to the 16 career clusters and related pathways.

Design and Modeling (560001) *fall semester*

Fee: $10 ..... Grades: 7-8

A course that uses solid modeling as part of the design process. Students learn sketching techniques; use descriptive geometry as a component of design, measurement, and computer modeling; and develop ideas, create models, test and evaluate design ideas, and communicate solutions.

Automation and Robotics (560003) *spring semester*

Fee: $10 ..... Grades: 7-8

A course that provides opportunities for students to trace the history, development, and influence of automation and robotics. Emphasis is placed on mechanical systems, energy transfer, machine automation, and computer control systems. Using the VEX Robotics® platform, students apply what they know to design and program traffic lights, robotic arms, and more.

Prattville High School

Air Force JROTC Leadership and Management of the Cadet Corps and Financial Education (480030)

Fee: $25 ..... Grades: 10-12

A one-credit course that provides opportunities for students to manage the entire cadet corps. This hands-on experience affords the cadets the opportunity to plan, organize, coordinate, direct, and control corps operations. Students will also practice communication, decision-making, personal-interactional, managerial, and organizational skills.

Air Force JROTC Leadership and Cultural Studies (480031)

Fee: $25 ..... Grades: 9-11

A one-credit course designed to provide students with an increased international awareness and insight into foreign affairs; an understanding of European, Middle Eastern, South and East Asian, African, and Latin American cultures; and an enhanced knowledge of America's interest and role in the world. Students apply prior leadership theory through hands-on practices and experiences.

Air Force JROTC Leadership and Survival (480032)

Fee: $25 ..... Grades: 9-12

A one-credit course designed to provide students with training in skills, knowledge, and attitudes necessary to successfully perform fundamental tasks.

Business Management and Adminstration

Business Essentials (450007)

Fee: $25 ..... Grades: 9-12

Business Essentials is a one-credit foundation course. Students develop an understanding of how academic skills in mathematics, economics, and written and oral communications are integral components of success in commerce and information

technology careers. Students examine current events to determine impact on business and industry and legal and ethical behavior, acquire knowledge of safe and secure environmental controls to enhance productivity, determine how resources are managed to achieve company goals, and identify employability and personal skills needed to obtain a career and be successful in the workplace. As students learn about different types of business ownership, they interpret industry laws and regulations to ensure compliance, identify principles of business management, and analyze business practices to determine ethical and social responsibilities.

Business Technology Applications (450006)

Fee: $25 ..... Grades: 9-12

A one-credit foundation course designed to assist students in developing technological proficiencies in word processing, spreadsheets, databases, presentations, communications, Internet use, ethics, and careers using technology applications. Simulations and projects promoting teamwork, leadership, and workplace skills offer further opportunities for application of knowledge and skills.
Applications covered: Word, Excel, Access, and PowerPoint.
PREREQUISITE: None

Multimedia Design (410016)

Fee: $25..... Grades: 9-12

A one-credit course designed to provide students with hands-on skills involving graphic design, digital photography, Web design, and digital video production. Students use various hardware peripherals and software for completing documents. Adobe Certification in Photoshop is available.
PREREQUISITE: Career Preparedness

Finance

Banking and Financial Services *(470011)*

Fee: $25 ..... Grades: 9-12

Banking and Financial Services is a one-credit course designed to help students develop skills related to banking and related services as they process customer transactions, maintain cash drawer, process documents, and respond to customer requests to provide other customer services. Students employ technical skills to perform data processing functions as well as to perform new account functions. Applicable skills are utilized by practicing lending functions, including aiding the customer in determining the best loan alternative; processing the customer's application to include appropriate information; and processing the loan to complete transactions.

Marketing

Sports and Entertainment Marketing Fundamentals (550013)

Fee: $25..... Grades: 9-12

A one-credit specialized course designed to offer students an opportunity to gain knowledge and develop skills related to the growing sports and entertainment industry. Sports Marketing addresses such diverse products as the sporting event itself, its athletes, sports facilities or locations, sporting goods, personal training, and sports information. Entertainment Marketing includes events such as fairs, concerts, trade shows, festivals, plays, product launches, causes, etc. Students will develop skills in the areas of merchandising, advertising, public relations/ publicity, event marketing, sponsoring, ticket distribution, and career opportunities as they relate to the sports and entertainment industry. Adobe Certification in Photoshop is available.

Television Production

Introduction to Television Production (440017)

Fee: $25 .....Grades: 9-12

Introduction to Television Production is a one-credit course that provides students with a basic overview of television production skills and professions. Students participate in classroom and laboratory activities regarding all aspects of television performance, production, and operations. Upon successful completion of this course, students are prepared for a specialized high school course or for further study in television, film and communications at the college level. This course is a prerequisite for Television Production—Writing, Producing, and Performing and Television Production—Studio Operations.

Foundation of Arts, Audio-Video Technology and Communications (440004)

Fee: $25 .....Grades: 9-12

A one-credit course designed to introduce students to the areas of advertising design, animation, commercial photography, graphic arts, and television production. Classroom, laboratory, and real-world experiences promote teamwork, leadership, and further opportunities for application of knowledge and skills.

Television Production—Writing, Producing, and Performing (440018)

Fee: $25 ..... Grades: 10-12

This one-credit course provides students with a variety of real-world learning opportunities through laboratory experiences in television writing, producing, and performing. Students perform specialized roles in a regularly scheduled television program along with students specializing in Television Production—Studio Operations. Students who successfully complete this course are prepared for further study in television, film, and communications at the college level; or for entry-level positions in television, film, and communications industries.
PREREQUISITE: Introduction to Television Production

Television Production—Studio Operations (440019)

Fee: $25 .....Grades: 10-12

Television Production—Studio Operations is a one-credit course that provides students with opportunities to participate in real-world laboratory experiences. They perform specialized roles in a regularly scheduled television program with students specializing in Television Production—Writing, Producing. Students who successfully complete this course are prepared for further study in television, film, and communications industries at the college level; or for entry-level positions in television, film and communications industries.
PREREQUISITE: Introduction to Television Production

CAREER & TECHNICAL STUDENT ORGANIZATIONS

Career and technical student organizations are integral, co-curricular components of each career and technical education course. These organizations serve as a means to enhance classroom instruction while helping students develop leadership abilities, expand workplace-readiness skills, and broaden opportunities for personal and professional growth.

DECA (association for marketing education students)

http://www.deca.org/

DECA, a national association of more than 170,000 marketing students, provides members with hands-on experiences in the fields of marketing, management, and entrepreneurship.
Membership Dues $30

Family, Career and Community Leaders of America (FCCLA)

http://www.fcclainc.org

FCCLA offers Alabama students the opportunity to expand their leadership potential and develop skills for life, such as planning, goal setting, problem solving, decision making, and interpersonal communication.
Membership Dues $20

Future Business Leaders of America - Phi Beta Lambda (FBLA-PBL)

http://www.fbla-pbl.org

FBLA-PBL is the largest business career student organization in the world. Its mission is to prepare today's students for success in business leadership.

Membership Dues $15

FFA (association for agriscience education students)

http://www.alabamaffa.org

FFA members develop their potential for leadership, personal growth, and career success through agricultural education, competitions, and conferences.

Membership Dues: $15

Health Occupations Students of America (HOSA)

http://www.hosa.org

HOSA's mission is to enhance the delivery of compassionate, quality health care by providing opportunities for knowledge, skill, and leadership development of all health science technology students.

Membership Dues: $16

SkillsUSA

SkillsUSA http://www.skillsusa-alabama.org

Alabama SkillsUSA emphasizes respect for the dignity of work, high standards in trade ethics, superior workmanship, quality, and safety.

Membership Dues $15

Technology Student Association (TSA)

http://www.tsaweb.org

TSA prepares students to meet the challenges of a high-tech world by promoting technological literacy, leadership, and problem-solving skills. Members have opportunities to develop and showcase their technology skills through individual and team competitions.

Membership Dues: $15

Notes