Russellville High School

2019-2020

ACADEMIES

Pursuing Excellence

No person shall be denied employment, be excluded from participation, be denied the benefits of, or subjected to the discrimination in any program or activity on the basis of race, color, disability, sex, religion, national origin, or age by the Russellville City School System. Equal access shall be available to the Boy Scouts and other designated youth groups. The Superintendent, Heath Grimes, has been designated as the person coordinating the Russellville City Schools' effort to implement this nondiscriminatory policy. If there are questions or concerts; contact him by phone at 256-331-2000, by email at heath.grimes@rcs.k12.al.us, or in writing at 1945 Waterloo Road, Russellville, Alabama 35653

Russellville High School
CTE Academies

Russellville City Schools

Pursuing Excellence

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Russellville City Schools Administration

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Russellville High School Guidance

Alissa Moore
Michelle Murray
Paul Foster - Consultant

Russellville High School
CTE Academies

Academy of
ENGINEERING

Academy of
ENGINEERING
Choose Three

- ☐ Foundations of Engineering
- ☐ Engineering Applications w/ Drafting
- ☐ Engineering Systems
- ☐ Engineering Research and Design

Foundations of Engineering

This course is designed as an overview of the engineering profession and fundamental skills utilized in general engineering. Students will learn about the various engineering disciplines and explore tools and technology used by engineers through project based learning and research.

Engineering Applications with Drafting

This course is designed to help students explore the application of engineering principles in various technological areas. Students will learn about engineering as it relates to construction, transportation, communication, manufacturing, and bioengineering.

Engineering Systems

This course is designed to further explore the mathematical and scientific principles used in engineering. Students will explore fluid, thermal, mechanical, and electrical systems involved in the engineering research and design process. Algebra II is the prerequisite for this course or may be taken concurrently.

Engineering Research and Design

This course is recommended for students in Grades 11–12. Students conduct research and design engineering projects to enhance their abilities and expand their interest in the field of engineering.

Russellville High School
CTE Academies

Academy of
COMPUTER SCIENCE

Computer Science Discoveries

Computer Science Discoveries is a full-year introductory computer science survey course for students in Grades 7-9. The course takes a wide lens on computer science by covering topics such as programming, physical computing, HTML/CSS, and data. Students are empowered to create authentic artifacts and engage with CS as a medium for creativity, communication, problem solving, and fun.

Computer Science Explorations

Exploring Computer Science is an introductory yearlong high school computer science course for students in Grades 9-10 focused on foundational computer science concepts and computational practices. Students will be introduced to the breadth of the field of computer science through an exploration of engaging and accessible topics. The course is designed to focus on the conceptual ideas of computing and help students understand why certain tools or languages might be utilized to solve particular problems. The goal of Exploring Computer Science is to develop in students the computational practices of algorithm development, problem solving and programming within the context of problems that are relevant to the lives of today's students. Students will also be introduced to topics such as interface design, limits of computers, and societal and ethical issues.
Prerequisite: It is recommended that students have completed Algebra I prior to enrolling or be concurrently enrolled in Algebra I. Exploring Computer Science is designed to be a college preparatory high school course and thus, should provide a rigorous, but accessible, introduction to computer science. No previous computer science experience is required.

AP Computer Science Principles

College-level advanced course following the curriculum established by the College Board Advanced Placement (AP) program for computer science; focuses on the innovative and multidisciplinary aspects of computing as well as the computational thinking practices that help students see how computing is relevant to many areas of their everyday lives; introduces students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts.

Academy of
COMPUTER SCIENCE
Choose Three

- ☐ Computer Science Discoveries
- ☐ Computer Science Explorations
- ☐ AP Computer Science Principles

Russellville High School
CTE Academies

Academy of
PRE-MED

Foundations of HealthScience

Foundations of HealthScience is a 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 except for Medical Terminology. It is recommended for students who want to prepare for further study in an array of health-related fields at the postsecondary level.

HealthScience Internship I & II

Health Science Internship is a one or two credit course designed for students in Grades 11 or 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. Theory and laboratory components comprise at least ten percent of the course. HealthScience Internship is designed to be completed in a hospital, extended care facility, rehabilitation center, medical office, imagery laboratory, or other health care facility. The prerequisite for the course is Foundations of Health Science.

Academy of
PRE-MED
Choose Three

- ☐ Foundations of HealthScience
- ☐ HealthScience Internship I
- ☐ HealthScience Internship II
- ☐ Medical Terminology
- ☐ Introduction to Pharmacy

Medical Terminology

Medical Terminology is 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. It is currently offered as a dual enrollment course through Northwest-Shoals Community College.

Introduction to Pharmacy

This is a one-credit course that introduces senior students to the pharmacy profession. Course content emphasizes the history of medicine, mathematics, technology, and legal issues. This course has a laboratory component allowing students the opportunity to observe skills learned in class at local pharmacies. Upon successful completion of this course, students are eligible to take the Pharmacy Technician Certification once they have obtained their high school diploma. Prerequisite: Foundations of Health Science.

Russellville High School
CTE Academies

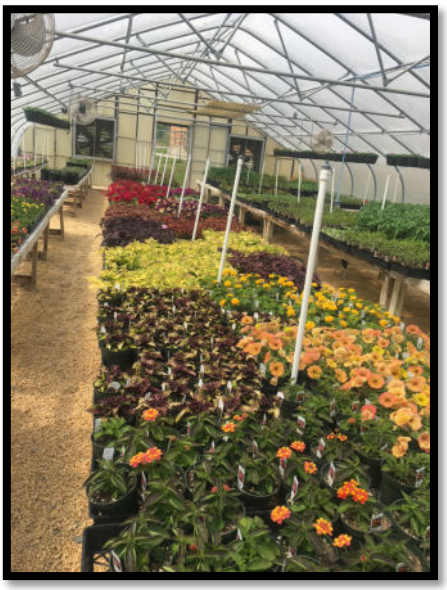
Academy of
AGRIBUSINESS

Academy of
AGRIBUSINESS
Choose Three

- ☐ Agriscience
- ☐ Horticulture
- ☐ Greenhouse
- ☐ Fish and Wildlife
- ☐ Fundamentals of Agriscience II (Building and Construction)
- ☐ Forestry
- ☐ Landscaping Design and Management

Russellville High School's Agriscience Academy affords students the opportunity to study in the Agriculture, Food and Natural Resources cluster of programs. This cluster prepares students for employment in career pathways that relate to the $70.4 billion industry of agriculture. The mission of agriscience education is to prepare students for successful careers and a lifetime of informed choices in the global agriculture, food, fiber and natural resources systems.

Agriscience



This course provides students with a general overview of the Agriculture, Food, and Natural Resources Systems; Animal Systems; Plant Systems; and Agribusiness Systems. Students will be involved in classroom and laboratory activities in each of the five pathway areas. Topics included in this course in 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.

CRI available: Landscape Management Technician, through Green Industry Web

Fish & Wildlife Management

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.

Russellville High School
CTE Academies

Fundamentals of Agriscience II (Building and Construction)

Fundamentals of Agriscience II is a 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. Emphasis will be placed on basic safety, construction math, hand tools, power tools, construction drawings, basic rigging, communication skills, employability skills, and material handling.

Greenhouse

Greenhouse Production and Management is a 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.

Horticulture

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.

Landscape Design and Management

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.
CRI available: Landscape Management Technician, through Green Industry Web

Forestry

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.

CRI available: Urban Forestry Technician, through Green Industry Web

Russellville High School
CTE Academies

Academy of
AUTOMOTIVE

Automotive Maintenance and Light Repair A

This course prepares students for entry into Automotive Maintenance and Light Repair B. Students explore career opportunities and requirements of a professional service technician. Content emphasizes beginning transportation service skills and workplace success skills. Students study safety, tools, equipment, shop operations, basic engine fundamentals, and basic technician skills.

Automotive Maintenance and Light Repair B

This course prepares students for entry into Automotive Maintenance and Light Repair C. Students study automotive general electrical systems, starting and charging systems, batteries, lighting, and electrical accessories. Content emphasizes beginning transportation service skills and workplace success skills.

Automotive Maintenance and Light Repair C

This course prepares students for entry into Automotive Maintenance and Light Repair D. Students study and service suspension and steering systems, and brake systems. Content emphasizes beginning transportation service skills and workplace success skills.

Academy of
AUTOMOTIVE
Choose Three

- ☐ Auto Maintenance and Light Repair A
- ☐ Auto Maintenance and Light Repair B
- ☐ Auto Maintenance and Light Repair C
- ☐ Auto Maintenance and Light Repair D
- ☐ Automotive Service Tech A
- ☐ Automotive Service Tech B

Automotive Maintenance and Light Repair D

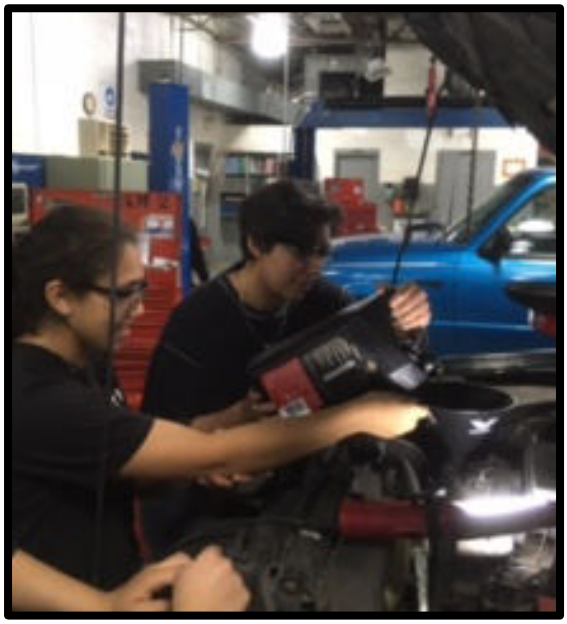
This course prepares students for entry into the automotive workforce or into post-secondary training. Student's study and service automotive HVAC systems, engine performance systems, automatic and manual transmission/transaxle systems, as well as practice workplace soft skills.

Automotive Service Tech A

This course furthers pre training. Students continue their studies of automotive systems but in more depth and detail.

Automotive Service Tech B

This course further prepares students for entry into the automotive workforce or post-secondary training. Students continue their studies of automotive systems but in more depth and detail.



Russellville High School
CTE Academies

Academy of
BUSINESS

Advanced Business Technology Applications

This course is designed to provide students with skills in computer technology and using integrated software with basic business applications. This course utilizes computers as a business tool through the use of database, spreadsheet, word-processing, and presentation software, along with Internet research. This course is a must for anyone wanting to attend college or enter the world of work. A major emphasis is placed on guiding students through real-world experiences to ease the school-to-career transition. Students can receive college articulation credit for CIS 146 through NWSCC for this course. Students are given the opportunity to earn Microsoft Office Certifications in this course.

Academy of
BUSINESS
Choose Three

- ☐ Advanced Business Technology Applications (Required)
- ☐ Accounting I
- ☐ Advanced Accounting
- ☐ Entrepreneurship
- ☐ Multimedia Design
- ☐ Mgt. Principles (Business Internship)
- ☐ Publications

Accounting I

This course is designed to place emphasis on basic principle, concepts, and procedures of accounting. Students are introduced to techniques of keeping special types of bookkeeping and operate related office equipment. Computer accounting applications and computer spreadsheets are also incorporated into the course. Students will gain valuable experience by completing business records for simulated businesses. This course is vital for anyone interested in a business career. This course is also helpful for students wanting to learn how to complete personal budgets, keep track of checking accounts, file taxes, and handle personal finances.

Advanced Accounting

This course offers increased emphasis in the "why" of accounting and a blend of advanced accounting principles and procedures using modern accounting tools. Throughout this course students will use computer accounting applications and modern accounting tools such as computer spreadsheets. Students will also be introduced to work simulations in order to explore career opportunities.

Russellville High School
CTE Academies

Academy of
BUSINESS

Entrepreneurship
This course provides students with the skills needed to effectively organize, develop, create, and manage a business. This course includes business management and entrepreneurship, communication and interpersonal skills, economics, and professional development foundations.

Multimedia Design
Multimedia Design (T4—Teens Teaming with Teachers and Technology) is designed to provide students with skills involving presentations, desktop publishing, web publishing, and digital graphics. In this class, students will work with one or more teachers to incorporate technology into one or more lesson plans. These projects will range from PowerPoint Presentations, to video production, to web pages.

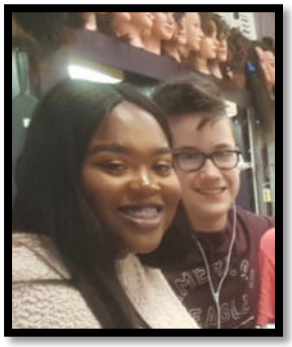
Management Principles (Business Internship)
A one-credit course designed to provide students with an understanding of the organizational functions of businesses, including quality concepts, project management, and problem solving. Emphasis is placed on becoming more skillful in the operation of an office, personality development, and work attitudes that are necessary for on-the-job success.

Students also participate in a business internship program. This is where students are placed in different businesses in the community to observe and obtain "hands-on" work experience during class time. Students must provide their own transportation for this program.

Publications
This course is 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 (yearbook, newsletters, program books, etc.). This is a senior course and students must be pre-approved by the instructor.

Russellville High School
CTE Academies

Academy of
COSMETOLOGY



Cosmetology courses are articulated classes that will transfer to college credit. Students who are eligible and successfully pass the class will receive college credit. Students may take a cosmetology course beginning their freshman year. These courses give students hands-on training in a variety of performance skills such as: manicures, pedicures, facials, cosmetic application, shampooing and conditioning treatments, hair cutting, hair styling, braiding, up-do's, pin curling, permanent waving, and hair coloring. Students will also gain knowledge concerning professionalism, salon management, safety and sanitation, properties of the hair, and the science of chemistry as it relates to the cosmetology field.

Academy of
COSMETOLOGY
Choose Three

- ☐ Cosmetology I
- ☐ Cosmetology II
- ☐ Cosmetology III
- ☐ Cosmetology IV
- ☐ Cosmetology V
- ☐ Cosmetology VI

Cosmetology I: Intro to Cosmetology

This course is designed to provide students with a study of concepts related to the cosmetology profession. Students gain initial practical experience in sanitation, shampooing, hair shaping, and hairstyling and are not limited to manicures, pedicure, facial care, cosmetics, shampooing, and conditioning theory.

Cosmetology II: Hair Coloring

Hair Cutting, Hair Styling, Extensions Laboratory *This course must be taken yearlong with Cosmetology I to receive college articulation credit.

Cosmetology III: Chemical Services

This course is designed to focus on the theory of chemical services related to chemical hair texturing. Students gain initial, practical experience in performing various chemical texturing activities. (Hair Coloring and Permanent Waving, Chemical Relaxing, and Soft Curly Perms Theory)

Cosmetology IV: Intro to Spa Techniques

Permanent Waving, Laboratory *This course must be taken yearlong with Cosmetology III to receive college articulation credit.

Cosmetology V: Advanced Spa Techniques

This course focuses on the structure and function of various systems of the body. This course also provides hands-on experiences in facial massage techniques, skin care, and hair removal.

Cosmetology VI: Salon Practices and Management

Basic Spa Techniques Laboratory *This course must be taken yearlong with Cosmetology V to receive college articulation credit.

Russellville High School
CTE Academies

Academy of
FINE ARTS

Beginning Chorus
This course is available for first-year choral students regardless of grade level. This ensemble will perform and compete in all choral activities, and students will be eligible for individual events throughout the year.

Advanced Chorus
Students will qualify for this course through auditions and will participate in competitive vocal performances throughout the year.

Beginning Theory and Sight Reading
This course is available for all students who wish to advance their sight-reading and musical theory skills.

Musical Theatre I
This course is a performance course. Entry into this course is audition-based. The focus of this course is the performance of monologues, scenes, and songs, as well as participation in competitions and RHS Musical Theatre productions.

Musical Theatre II
This course is a performance course. Entry into this course is audition-based. The focus of this course is the performance of monologues, scenes, and songs, as well as participation in competitions and RHS Musical Theatre productions.

Technical Production
This class is offered to students in grades nine through twelve interested in set design, set construction, sound design, lighting programming, and automated lighting control. The focus of this course is assisting with the production of the RHS musicals.

Theatre Production: This class is offered to students in grades 9-12 interested in set painting, stage dressing, costume design, makeup design, props creation, and marketing. The focus of this course is assisting with the production of musicals.

Concert Band: This course is for the student who has attained intermediate proficiency on his/her instrument. Music of increasing difficulty is presented with instruction designed to increase the range, flexibility, endurance, tone quality, and artistic interpretation of the student. This group performs in school and public concerts. Attendance at extra rehearsals and all performances is required.

Marching Band: This group will meet each fall semester with rehearsals beginning in late July. The class will meet during skinny period with three rehearsals after school. The marching band performs at all Russellville High School football games as well as parades and competitions. This course also fulfills the required LIFE Physical Education credit.

Academy of
FINE ARTS
Choose Three

- ☐ Beginning Chorus
- ☐ Advanced Chorus
- ☐ Beg. Theory and Sight Reading
- ☐ Musical Theatre I
- ☐ Musical Theatre II
- ☐ Technical Production
- ☐ Theatre Production
- ☐ Concert Band
- ☐ Marching Band
- ☐ Wind Ensemble
- ☐ Instrumental Techniques
- ☐ Introduction to Art
- ☐ Arts and Crafts
- ☐ Painting
- ☐ Drawing
- ☐ Sculpture and Pottery

Wind Ensemble
This is the most advanced of the ensembles and is designed for the student who is a highly competent performer. The student is challenged by music of the highest caliber, requiring more sophisticated understanding of complex rhythms, all key signatures, musical terminology, ensemble skills, and extra effort on the part of the student. Wind Ensemble is a major performing ensemble, and participation in concerts and festivals is required. After school rehearsals on an as needed basis.

Instrumental Techniques
This course is designed to develop musical performance skills for the beginner musician.

Russellville High School
CTE Academies

VISUAL ARTS

Introduction to Art

This course provides students with a general foundation in studying various types of art. Those types of art include drawing, painting, arts and crafts and sculpture & pottery, printmaking, and graphic design. Students will apply the elements and principles of art to create original works of art.

Arts and Crafts

This course provides students with a foundation in studying various types of arts and crafts. Those types of arts and crafts include clay, ceramics, fabric, weaving, painting and other types of media. Students will apply the elements and principles of art to create original works of art.

Painting

This course provides students with a foundation in studying various types of painting. Those types of paintings include watercolor, acrylic, oil, tempera, mixed media and other types of media. Students will apply the elements and principles of art to create original works of art.

Drawing

This course provides students with a foundation in studying various types of drawing. Those types of drawing include pencil, ink, charcoal, colored pencil, marker, oil pastel and chalk pastel. Students will apply the elements and principles of art to create original works of art.

Sculpture and Pottery

This course provides students with a foundation in studying various types of sculpture and pottery. Those types of sculpture and pottery include working with clay, ceramics, wire and paper. Students will apply the elements and principles of art to create original works of art.

Russellville High School
CTE Academies

Academy of
HEALTHCARE

Foundations of Health Science

This is a 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 21st century. This course is the prerequisite for all the health science courses except for Medical Terminology. It is recommended for students who want to prepare for further study in an array of health-related fields at the postsecondary level.

Nurse Aide Training I & II

This is a two-credit course, scheduled during both semesters, that is designed for high school seniors to develop health care specific knowledge for a career in the medical field. Students will pursue skill mastery in the classroom, laboratory, and also participate in intensive job-specific training in the clinical area. Students must successfully complete an approved program and pass the National Nurse Aide Assessment certification exam in order to become a Certified Nurse Aide (CNA).

Emergency Medical Service (EMS)

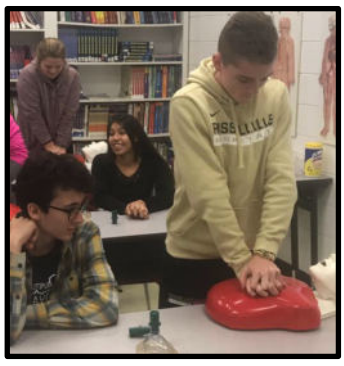
The EMS program is designed to prepare qualified applicants in basic and advanced emergency care in clinical and in field environments. Graduates qualify for employment with fire and rescue departments, ambulance services, and industries and emergency departments within medical facilities.

Academy of
HEALTHCARE
Choose Three

- ☐ Foundations of Health Science
- ☐ Nurse Aide Training I
- ☐ Nurse Aide Training II
- ☐ Emergency Medical Service (EMS)
- ☐ Medical Terminology

Medical Terminology

Medical Terminology is 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. It is currently offered as a dual enrollment course through Northwest-Shoals Community College.



Russellville High School
CTE Academies

Academy of
Human Services

Parenting
This course focuses on knowledge and skills related to family life and child development. This course includes the study of family dynamics, personal growth, preparation for marriage and parenthood, child growth and development, and career opportunities in family life and child development.

Event Planning
This is a one-credit course taught in grades 11-12. Students will learn concepts related to food preparation techniques, healthy dietary choices, and etiquette and learn to organize and plan all aspects of business and social events including the food, location, and décor associated with various events.

Family and Consumer Science
Family and Consumer Science is designed for 9th and 10th grade students as a general course. The focus is on preparing the student to establish and maintain a satisfying home and family life and work life. Course Content provides opportunities for students to explore family food, clothing, technology, relationships and resource management. Family, Career and Community Leaders of America (FCCLA) is an integral part of the curriculum, enhances leadership development skills and provides opportunities for community service. ServSafe Managers and Guest Service Gold Certification Credential offered.

Food Innovations
Food Innovations and Media is a one-credit course taught in grades 10-12. Students will learn concepts related to food preparation techniques, healthy dietary choices, etiquette and the relation of diet to the current food supply and food production techniques. Students will also apply social media and digital design techniques, photographic styling applications, and journalism skills to market food items.

Academy of
Human Services
Choose Three

- ☐ Parenting
- ☐ Event Planning
- ☐ Family and Consumer Science
- ☐ Food Innovations (Required)

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Russellville High School
CTE Academies

Academy of
LEADERSHIP / JROTC

Army JROTC I
Unit 1 – Citizenship in Action: This course engages students in the practice of basic citizenship customs and traditions and explores the opportunities for non-military and military national service. ***May count as PE credit and/or Career Preparation.**

Army JROTC II
Unit 2 – Leadership Theory and Application: This course accesses attributes of leadership, explores leadership styles and behaviors, analyzes situations that require leadership, and relates leadership skills to the JROTC program.

Army JROTC III
Units 3-6 – Foundations of Army JROTC and Getting Involved / Service to the Nation: This course will help student cadets build essential skills needed to maximize learning potential and future success and lay the groundwork for service learning. Students will recognize the value of their varied learning styles and multiple intelligences. Student cadets will be able to apply learning strategies to improve their critical thinking, study, and communication skills. Student cadets will also be able to develop and expand their abilities to resolve conflict and prevent violence. These leadership units will helps student cadets prepare for life after high school while helping them focus on career and personal planning.

Army JROTC IV
Units 3-6 – Foundations of Army JROTC and Getting Involved / Service to the Nation: This course will help student cadets build essential skills needed to maximize learning potential and future success and lay the groundwork for service learning. Students will recognize the value of their varied learning styles and multiple intelligences. Student cadets will be able to apply learning strategies to improve their critical thinking, study, and communication skills. Student cadets will also be able to develop and expand their abilities to resolve conflict and prevent violence. These leadership units will helps student cadets prepare for life after high school while helping them focus on career and personal planning.

Academy of
LEADERSHIP / JROTC
Choose Three

- ☐ Army JROTC I
- ☐ Army JROTC II
- ☐ Army JROTC III
- ☐ Army JROTC IV

Russellville High School
CTE Academies

Academy of
MANUFACTURING

Foundations of Engineering

This course is designed as an overview of the engineering profession and fundamental skills utilized in general engineering. Students will learn about the various engineering disciplines and explore tools and technology used by engineers through project based learning and research

Welding I

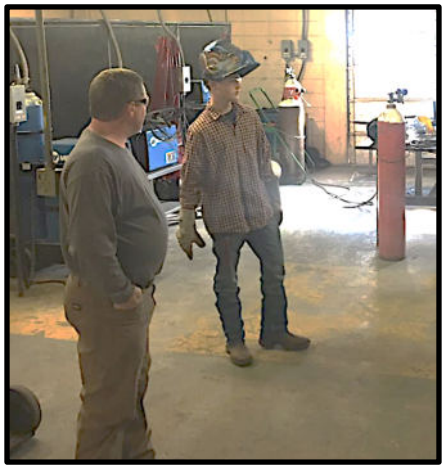
This course provides students with instruction in safety practices and terminology in the Shielded Metal Arc Welding (SMAW) process. Emphasis is placed on safety, welding terminology, equipment identification, set-up and operation, and related information in the SMAW process. This course also covers 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, carbon arc cutting, and plasma arc cutting. Upon successful completion of this course, students will earn college credit for Welding 108 through NWSCC. NWSCC tuition fee may be waived if funds available.

Welding II

This course provides students 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 provides the student with the skills and knowledge necessary for the safe operation of carbon arc cutting and plasma arc cutting. Upon successful completion of this course, students will earn college credit for Welding 122 through NWSCC. NWSCC tuition fee may be waived if funds available.

Academy of
MANUFACTURING
Choose Three

- ☐ Foundations of Engineering
- ☐ Welding I (Required)
- ☐ Welding II
- ☐ Welding III
- ☐ Introduction to Manufacturing
- ☐ Fundamentals of Agriscience II
- ☐ Auto Maintenance and Light Repair A
- ☐ Auto Maintenance and Light Repair B
- ☐ Auto Maintenance and Light Repair C
- ☐ Auto Maintenance and Light Repair D
- ☐ Automotive Service Tech A
- ☐ Automotive Service Tech B



Welding III

This course provides students 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. Upon successful completion of this course, students will earn college credit for Welding 109 through NWSCC. NWSCC tuition fee may be waived if funds available.

Russellville High School
CTE Academies

Welding IV

This course is designed to introduce students 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 the applicable welding code. Upon successful completion of this course, students will earn college credit for Welding 123 through NWSCC. NWSCC tuition fee may be waived if funds available.

Introduction to Manufacturing

A one-credit course designed to provide students with the fundamental knowledge and skills needed in the manufacturing industry. Emphasis is placed on job safety, use of manufacturing materials, primary manufacturing processes, secondary manufacturing processes, and manufacturing systems. Upon successful completion of this course, students perform basic tasks related to the manufacturing industry.

Fundamentals of Agriscience II (Building and Construction)

Fundamentals of Agriscience II is a 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. Emphasis will be placed on basic safety, construction math, hand tools, power tools, construction drawings, basic rigging, communication skills, employability skills, and material handling.

Automotive Maintenance and Light Repair A

This course prepares students for entry into Automotive Maintenance and Light Repair B. Students explore career opportunities and requirements of a professional service technician. Content emphasizes beginning transportation service skills and workplace success skills. Students study safety, tools, equipment, shop operations, basic engine fundamentals, and basic technician skills.

Automotive Maintenance and Light Repair B

This course prepares students for entry into Automotive Maintenance and Light Repair C. Students study automotive general electrical systems, starting and charging systems, batteries, lighting, and electrical accessories. Content emphasizes beginning transportation service skills and workplace success skills.

Automotive Maintenance and Light Repair C

This course prepares students for entry into Automotive Maintenance and Light Repair D. Students study and service suspension and steering systems, and brake systems. Content emphasizes beginning transportation service skills and workplace success skills.

Automotive Maintenance and Light Repair D

This course prepares students for entry into the automotive workforce or into post- secondary training. Student's study and service automotive HVAC systems, engine performance systems, automatic and manual transmission/transaxle systems, as well as practice workplace soft skills.

Automotive Service Tech A

This course further prepares students for entry into the automotive workforce or post-secondary training. Students continue their studies of automotive systems but in more depth and detail.

Automotive Service Tech B

This course further prepares students for entry into the automotive workforce or post-secondary training. Students continue their studies of automotive systems but in more depth and detail.

Russellville High School
CTE Academies

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Bowen Family Dentistry

Brett M. Bowen, DDS

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