

# CAREER & TECHNICAL EDUCATION

2022-2023

COURSE OFFERINGS & CAREER PATHWAYS



Agriculture - Business & Information Technology - Career Connections - Marketing - Technology Education - Health & Medical Science - Family & Consumer Science - Trade & Industrial Education



Dear Student,

Thank you for your interest in Career and Technical Education! This booklet has been created so that you may become better familiarized with course offerings, sequencing combinations and potential opportunities for post-secondary course credit. It is also our hope that you will use this as a resource when you create or revise your Academic and Career Plan with your counselor. Unfortunately, CTE courses are all too often labeled as classes for "those kids". While I'm never sure who "those kids" are, I do know that the courses we offer are challenging, valuable, and great preparation for the next step in our students' lives. Whether that step be further education at college or technical school, enlisting in the military, entering the workforce with work skills, or a combination of these, CTE courses enhance the journey. Career and Technical Education courses cover a variety of career pathways. As you review this booklet, you will see multiple options. Courses are taught at either high school or Blue Ridge Technical Center (a quick bus ride from either high school). For further information, please contact your school counselor or the office at BRTC.

Sincerely,

Jane C. Baker

Director of Career and Technical Education

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# Work-Based Learning

### Virginia's CTE programs include the following 3 components:

- Classroom instruction the essential component for students to master the academic and technical competencies, attitudes, and work ethic necessary for career success and lifelong learning
- Work-Based Learning (WBL) experiences opportunities for students to apply and refine knowledge, attitudes, and skills through professionally coordinated and supervised work experience directly related to career goals
- Career and Technical Student Organizations (CTSOs) organizations that provide experiences that reinforce and strengthen classroom learning and prepare students for individual responsibility, teamwork, and leadership in their chosen career pathways

### **Work-Based Learning**

The WBL experience component builds on the benefits of the other two components by assisting students with the transition from the classroom to the workplace. Students' knowledge, skills, and attitudes are enhanced by participation in supervised, authentic experiences. WBL experiences are valuable because they help students develop careers beyond their secondary and postsecondary education.

There are twelve types of High-Quality Work-Based Learning (WBL) methods of instruction used in Virginia;



- Job Shadowing
- Service Learning
- Mentorship
- Externship
- School-based Enterprise
- Internship

- Entrepreneurship
- Clinical Experience
- Cooperative Education
- Youth Registered Apprenticeship
- Registered Apprenticeship
- Supervised Agricultural Experience

Contact the WBL Coordinator to learn more about opportunities for students to earn one credit toward graduation in addition to any credit earned through the associated CTE course in cooperative education, internship, entrepreneurship, youth registered apprenticeship, and supervised agricultural experience for completing 280 hours of work experience and one half credit for 140 hours of work experience in mentorship.

High-Quality Work-Based Learning (WBL) is comprised of school-coordinated workplace experiences that are

- related to students' career goals and/or interests
- integrated with instruction, and
- performed in partnership with local businesses and organizations.

WBL experiences enable students to apply classroom instruction in a real-world business or service-oriented work environment. WBL related jobs can take place during the cooperating CTE class or after school hours. A High-Quality WBL experience may help a student to satisfy graduation requirements.

Some of our WBL business partners have included Robey's Welding, Lowe's, Ramsey's TruValueHardware, Angel's Korner Daycare, Front Royal Dental Care, Marlow Autogroup, C&C Ice Cream, WCPS, Loving Angels Home Health, McKinney Services, Beckstrom Electric, D&H Heating and Air, Royal Decking and Remodeling and J.E. Richards, Inc.

#### Virginia's 5 C's of Learning

CTSO's and WBL experiences reinforce Virginia's 5 C's—by allowing students to apply these skills in a real-world business, service-oriented work environment, student enterprise, team project or competition.

Collaboration: Work with community members, peers, and mentors

**Communication**: Write and present proposals; make requests and get permissions; publicize and present final project

Citizenship: Understand laws and regulations; seek to improve the community

Creativity: Publicize/advertise project; solve problems; present findings

Critical Thinking: Develop a project to meet a community need or solve a community problem

#### **Career and Technical Student Organizations-CTSOs**

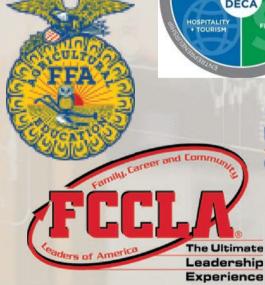
Career readiness does not stop in the classroom. In addition to the hands on learning that students get from field experts in the classroom, they also have the opportunity to gain additional experience by joining and competing with one of our Career & Technical Student Organizations (CTSOs). Contact your instructor or guidance counselor for more information on how you can get involved in one of these opportunities.



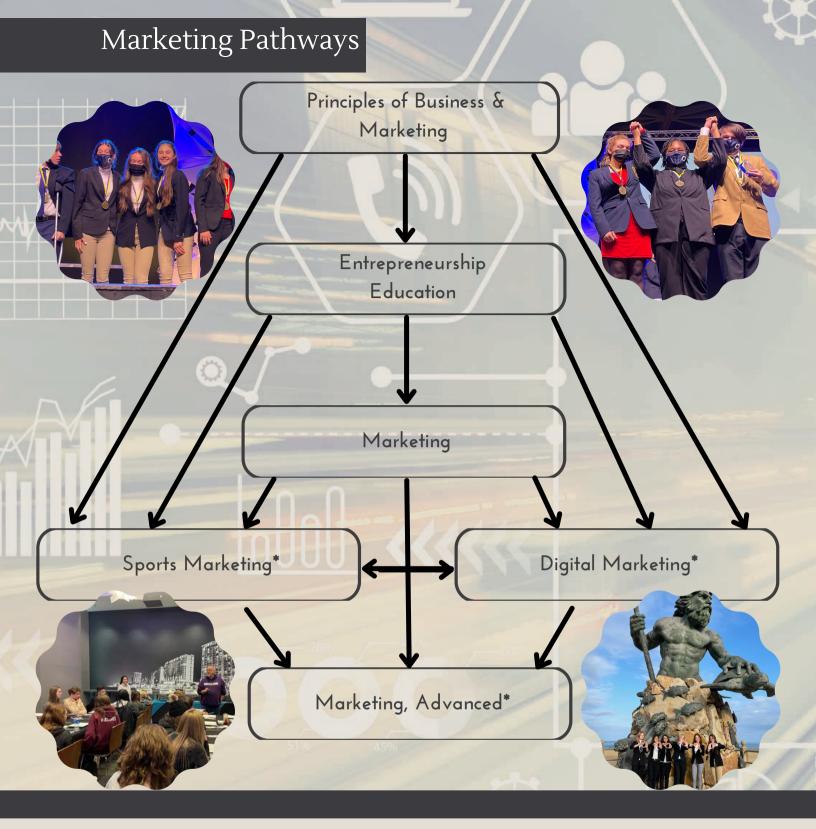


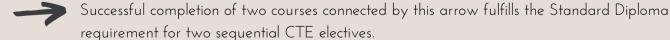




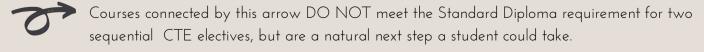








requirement for two sequential CTE electives.





Courses that require a prerequisite are noted with an \*.

# Marketing Class Descriptions

### Principles of Business and Marketing (6115/6116)

Grades 9-10; 1 Credit; Prerequisite: None

Students discover the roles of business and marketing in the free enterprise system and the global economy. Students examine basic financial concepts of banking, insurance, credit, taxation, and investments to provide a strong background for making sound decisions as consumers, wage earners, and citizens. The real-world effects of technology, effective communication, and interpersonal skills is evident throughout the course. This course also supports careerdevelopment skills and explores career options.

### **Entrepreneurship Education (9093C)**

Grades 9-12; 1 Credit; Prerequisite: None

This course introduces students to the exciting world of creating, owning, and launching their own business. Students will learn concepts and techniques for planning an entrepreneurial venture, using design thinking and business model development. Students will learn about financial statements, marketing principles, sales and customer service, and basic economic principles for successful operation. "Entrepreneurship" may be offered as a complement to an existing concentration sequence in any CTE program area. In some instances, where noted, it may be combined with specific courses to create concentration sequences.

#### Marketing (8120)

Grades 9-12; 1 Credit; Prerequisite: None

Students examine activities in marketing and business important for success in marketing employment and postsecondary education. Students will learn how products are developed, branded, and sold to businesses and consumers. Students will analyze industry trends and gain hands-on experience in the marketing of goods, services, and ideas. Topics will include professionalism in the workplace, product planning and positioning, promotion, pricing, selling, economic issues, and the impact of technology on the marketplace.

#### Marketing, Advanced (8130)

Grades 11-12; 1 Credit; Prerequisite: 6115, 8120 or 8175C

Students build on knowledge gained in a prior Marketing course. Students participate in supervisory and management activities focusing on the marketing mix, purchasing, financing, human resources, global marketing, pricing, and emerging technologies. Students will prepare for advancement in marketing careers and postsecondary education. Computer/technology applications and DECA activities enhance the course.

### Digital Marketing (8125)

Grades 10-12; 1 Credit; Prerequisite: 6115

This course introduces students to digital and social media marketing. Students explore principles, strategies, tools, and tactics related to consumers, branding, advertising, and promotions. Students explore how success is measured in a digital and social media marketing campaign. This course emphasizes ethics, laws, and security. Students also investigate business and marketing plans, as well as careers in digital and social media marketing. This course reinforces mathematics, science, English, and history and social science Standards of Learning.

#### Sports Marketing (8175C)

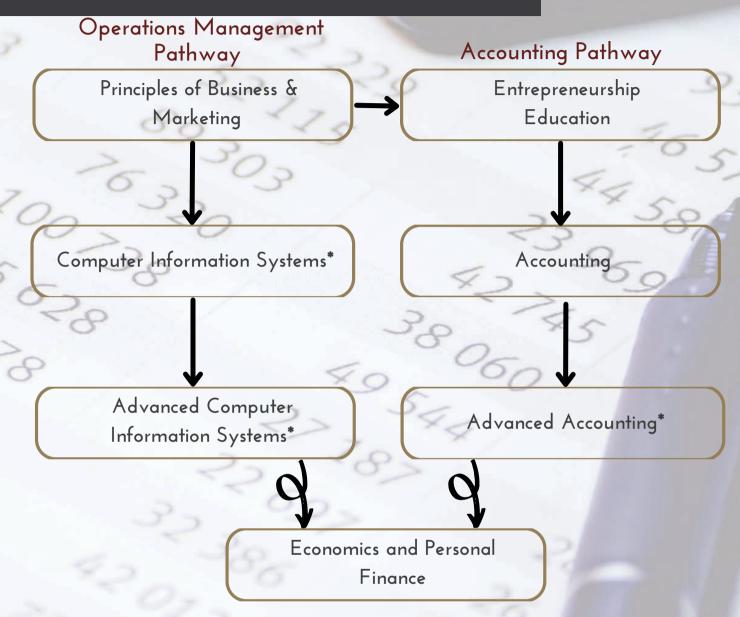
Grades 10-12; 1 Credit; Prerequisite: 6115

This course helps students develop a thorough understanding of fundamental marketing concepts and theories as they relate to the sports and entertainment industries. Students will investigate the components of customer service, branding, product development, pricing and distribution, business structures, sales processes, digital media, sponsorships and endorsements, as well as 3 promotion needed for sports and entertainment events. The course explores career options and develops workplace readiness skills.



Marketing Courses are enhanced by computer/technology applications and DECA activities. DECA, the co-curricular student organization, offers opportunities in leadership, community, and competitive events.

# Business & Information Technology (Operations Management & Accounting) Pathways





Successful completion of two courses connected by this arrow fulfills the Standard Diploma requirement for two sequential CTE electives.



Courses connected by this arrow DO NOT meet the Standard Diploma requirement for two sequential CTE electives, but are a natural next step a student could take.



Courses that require a prerequisite are noted with an \*.

# Business & Information Technology (Operations Management & Accounting) Class Descriptions

#### Entrepreneurship Education and Principles of Business & Marketing

See Page 6 for Class Description

#### Computer Info Systems (6614C)

Grades 9-12; 1 Credit; Recommended Pre-Requisite: Keyboarding course(s) or teacher-approved demonstration and documentation of touch keyboarding skills

Students apply problem-solving skills to real-life situations through word processing, spreadsheets, databases, multimedia presentations, and integrated software activities. Students work individually and in groups to explore computer concepts, operating systems, networks, telecommunications, emerging technologies, and career opportunities related to the information technology field.

#### Advanced CIS (6615C)

Grades 10-12; 1 Credit; Prerequisite: CIS (6612 or 6614C) Students apply problem-solving skills to real-life situations through advanced integrated software applications, including printed, electronic, and web publications. Students work individually and in groups to explore advanced computer maintenance activities, website development, programming, networking, emerging technology, and employability skills. Students enhance computer information technology skills through the use of advanced integrated applications to create documents, publications, and websites including complex graphs, customized reports, and multimedia presentations. In addition to implementing programming and executing network activities, students also will practice the maintenance, management, and troubleshooting of systems; legal and ethical issues are explored; preparation is given for industry certifications; and employability skills are developed.

#### Accounting (6320)

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Grades 10-12; 1 Credit; Recommended Prerequisite: Keyboarding or Digital Applications course(s) or teacher approved demonstration and documentation of touch keyboarding skills.

Accounting students study the basic principles, concepts, and practices of the accounting cycle for a service business and a merchandising business. Topics covered include analyzing transactions, journalizing and posting entries, preparing payroll records and financial statements, and managing cash control systems. Business ethics and professional conduct are emphasized. Students learn fundamental accounting procedures.

#### **Advanced Accounting (6321)**

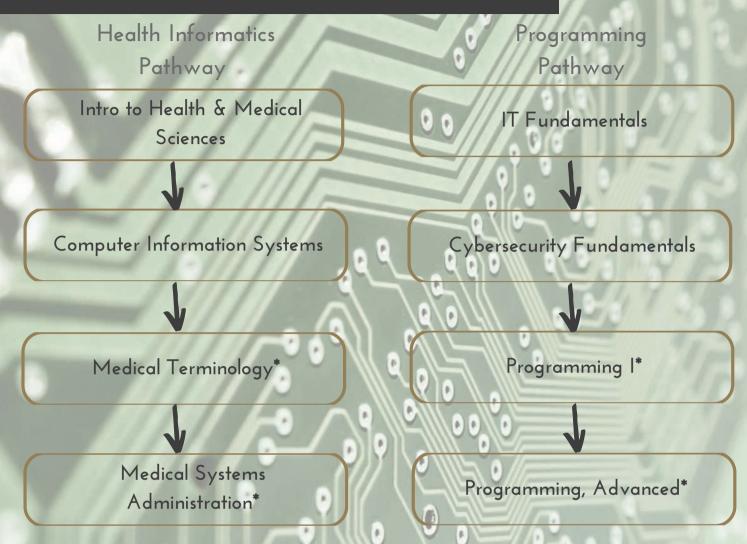
Advanced Accounting students gain knowledge of advanced accounting principles, procedures, and techniques used to solve business problems and make financial decisions. Students work in a technology-integrated environment, using accounting and spreadsheet software to analyze, synthesize, evaluate, and interpret business financial data related to inventory, fixed assets, notes/accounts payable and receivable, implementation of a partnership and a corporation, and other specialized accounting systems. Using authentic workplace scenarios that reflect current industry trends and standards, students analyze financial data and acquire knowledge of business ethics.

### **Economics and Personal Finance (6120C)**

Grades 11-12; 1 Credit; Prerequisite: None

Students learn how economies and markets operate and how the United States economy is interconnected with the global economy. Additionally they learn how to navigate the financial decisions they must face and to make informed decisions relating to career exploration, budgeting, banking, credit, insurance, spending, financing postsecondary education, taxes, saving and investing, buying/leasing a vehicle, and living independently. They also learn the importance of investing in themselves in order to gain the knowledge and skills valued in the marketplace. Development of financial literacy skills and an understanding of economic principles will provide the basis for responsible citizenship, more effective participation in the workforce, and career success. The course incorporates all economics and financial literacy objectives included in the Code of Virginia §22.1-200-03B. Note: As enacted by the General Assembly of 2011 and prescribed by the Board of Education, beginning with students who enter the ninth-grade class for the first time in 2011-2012 and beyond, all students shall earn one (1) standard credit in Economics and Personal Finance. All the Economics and Personal Finance Standards of Learning to meet that graduation requirement for the Standard and Advanced Studies diplomas are included in the instruction of this course.

# Business & Information Technology (Health Informatics & Programming) Pathways





# Earn a Career Studies Certificate in Medical Office Administration!

Dual-Enroll these three courses with LFCC:

Computer Info Systems I + Medical Terminology + Medical Systems Administration
Upon completion of these courses, you will earn a Career Studies Certificate from LFCC and be eligible to take the National Health Carreer Association's Certified Medical Administrative Assitant (CMA) exam. The student will be responsible for paying the tuition and fees associated with dual-enrolled classes.



Successful completion of two courses connected by this arrow fulfills the Standard Diploma requirement for two sequential CTE electives.



# Business & Information Technology (Health Informatics and Programming) Class Descriptions

# Intro to Health & Medical Science (8302C) Class at BRTC

Grades 9-12; 1 Credit; Prerequisite: Biology strongly recommended

This course introduces the student to a variety of healthcare careers and develops basic skills required in all health and medical sciences. It is designed to help students understand the key elements of the U.S. healthcare system and to learn basic healthcare terminology, anatomy and physiology for each body system, pathologies, diagnostic and clinical procedures, therapeutic interventions, and the fundamentals of traumatic and medical emergency care. Throughout the course, instruction emphasizes safety, cleanliness, asepsis, professionalism, accountability, and efficiency within the healthcare environment. Students also begin gaining jobseeking skills for entry into the health and medical sciences field. In addition, instruction may include the basics of medical laboratory procedures, pharmacology fundamentals, biotechnology concepts, and communication skills essential for providing quality patient care...

### Medical Terminology (8383C) Class at BRTC

Grades 10-12; 1 Credit; Prerequisite: Intro to Health and Medical Sciences (8302C)

Medical Terminology is designed to help students learn common medical terms essential for patient care. Topics are presented in logical order, beginning with each body system's anatomy and physiology and progressing through pathology, laboratory tests and clinical procedures, therapeutic interventions, and pharmacology. Students learn concepts, terms, and abbreviations for each topic.

# Medical Systems Administration (6730C) Dual Enrollment Option-Class at BRTC

Grades 11-12; 1 Credit; Recommended Prerequisite: Strong Keyboarding Skills

Students wishing to gain employment in the healthcare field may take this course to learn how to use medical terminology and apply administrative procedures necessary to be productive employees in a healthcare environment. Students will learn how to manage office activities, enhance communication and employability skills, identify legal and ethical issues in healthcare practices, and manage financial activities. Work-based learning opportunities are available for this course.

# Cybersecurity Fundamentals (6302C) Class at BRTC

Grades 9-12; 1 Credit; Prerequisite: None
Cybersecurity affects every individual, organization, and nation. This course focuses on the evolving and pervasive technological environment with an emphasis on securing personal, organizational, and national information.
Students will be introduced to the principles of cybersecurity, explore emerging technologies, examine threats and protective measures, and investigate the diverse high-skill, high-wage, and high-demand career opportunities in the field of cybersecurity. Exciting opportunities will be presented to use interactive current resources in the study of cybersecurity such as Virginia Cyber Range, Virginia Space Grant Consortium, and Cyber.Org. Students will have the opportunity to prepare for success on related industry certifications aligned to the

# Programming I (6640C) Class at BRTC

course content.

Grades 10-12; 1 Credit; Prerequisite: Keyboarding or CIS

Students in the Programming course explore programming concepts, use algorithmic procedures, implement programming procedures with one or more standard languages, and master programming fundamentals. Coding is used throughout the course. Graphical user interfaces may be used as students design and develop interactive multimedia applications, including game 3 programs. In addition, students employ hypertext markup language (HTML) or JavaScript to create web pages. Students develop their employability skills through a variety of activities.

# Programming, Advanced (6641C) Class at BRTC

Grades 11-12; 1 Credit; Prerequisite: Programming 6640

Building on their foundation of programming skills,
Advanced Programming students use objectoriented
programming to develop database applications,
interactive multimedia applications including game
applications, mobile applications, and web applications.
Students continue to develop their employability skills as
they research pathways for continuing education and
careers in the information technology industry and engage
in various career-building activities.

# Health & Medical Science Pathways

Therapeutic Services	Therapeutic Services-Sports	Biomedical- Project Lead the Way (PLTW)	
Introduction to Health and Medical Science (8302)	Introduction to Health and Medical Science (8302)	Principles of Biomedical (8379)	
Medical Terminology (8383)	Medical Terminology (8383)	Human Body Systems (8380)	
Nurse Aide I (8360)	Sports Medicine I (8316)	Medical Terminology (8383)	
Nurse Aide II (8362)	Sports Medicine II (8317)	Medical Interventions (8381)	
Patient Care Tech (8303)	Emergency Medical Technician Class Description on Pg 24	Biomedical Innovation (8382)	

The pathways above are suggestions, talk to your guidance counselor to discover all available options.

# Project Lead the Way Biomedical Class Descriptions



# Principles of the Biomedical Sciences-PLTW (8379C) Class at BRTC

Grades 9-12; 1 Credit; Prerequisite: Biology strongly recommended. 9th Graders should also enroll in Biology In this specialization course for Project Lead the Way (PLTW), students are taught concepts of forensic inquiry, DNA and inheritance, and the function of human body systems, exploring the body through diseases, such as those leading to diabetes and heart, sickle cell, and infectious diseases. Students also explore medical interventions, postmortem examination, bioprocessing, bioinformatics, and concepts of microbiology and genetic engineering.

#### Human Body Systems-PLTW (8380C) Class at BRTC

Grades 10-12; 1 Credit; Prerequisite: 8379C

In this specialization course for Project Lead the Way (PLTW), students explore the human body systems of communication, power, and movement. To do this, students are taught the body's components, tissues, molecules, and cells, as well as concepts of homeostasis and body system defenses.

### Medical Interventions-PLTW (8381C) Class at BRTC

Grades 11-12; 1 Credit; Prerequisite: 8380C

In this specialization course for Project Lead the Way (PLTW), students are taught concepts in fighting infections, understanding genetics, and preventing, detecting, and treating cancer and organ failure.

#### Biomedical Innovation-PLTW (8382C) Class at BRTC

Grades 11-12; 1 Credit; Prerequisite: 8381C

In this specialization course for Project Lead the Way (PLTW), students are taught concepts of human physiology, medical innovation, water contamination, public health issues, molecular biology, and forensic autopsy. Students complete an independent project as a culminating activity.

Research demonstrates that PLTW students outperform their peers in school, are better prepared for post secondary studies, and are more likely to consider careers as scientists, technology experts, engineers, mathematicians, healthcare providers and researchers compared to their non-PLTW peers. Students find PLTW programs relevant, inspiring, engaging and foundational to their future success. -PLTW.org

# Health & Medical Science Class Descriptions

# Intro to Health & Medical Sciences (8302C) Class at BRTC

Grades 9-12; 1 Credit; Prerequisite: Biology strongly recommended

This course introduces the student to a variety of healthcare careers and develops basic skills required in all health and medical sciences. It is designed to help students understand the key elements of the U.S. healthcare system and to learn basic healthcare terminology, anatomy and physiology for each body system, pathologies, diagnostic and clinical procedures, therapeutic interventions, and the fundamentals of traumatic and medical emergency care. Throughout the course, instruction emphasizes safety, cleanliness, asepsis, professionalism, accountability, and efficiency within the healthcare environment. Students also begin gaining jobseeking skills for entry into the health and medical sciences field. In addition, instruction may include the basics of medical laboratory procedures, pharmacology fundamentals, biotechnology concepts, and communication skills essential for providing quality patient care.

# Medical Terminology (8383C) Dual Enrollment Option-Class at BRTC

Grades 10-12; 1 Credit; Prerequisite: Intro to Health and Medical Sciences (8302C)

Medical Terminology is designed to help students learn common medical terms essential for patient care. Topics are presented in logical order, beginning with each body system's anatomy and physiology and progressing through pathology, laboratory tests and clinical procedures, therapeutic interventions, and pharmacology. Students learn concepts, terms, and abbreviations for each topic.



# Sports Medicine I (8316C) Dual Enrolled-WCHS

Grades 11-12; 1 Credit; Prerequisite: Biology I
In this course, students earn a certification in First
Aid/CPR/AED. The course introduces students to topics
such as human anatomy and physiology, nutrition,
biomechanics, medical terminology, injuries and illnesses,
and legal and ethical issues in sports medicine. Students
also examine prospective careers in the sports medicine
field. Upon successful completion of this course, students
are eligible to take Sports Medicine II and pursue
certification as a personal trainer. Dual Enrollment option
offered only at WCHS.

# Sports Medicine II (8317C) Dual Enrolled-WCHS

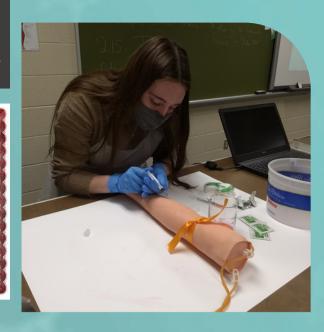
Grades 12; 1 Credit; Prerequisite: sports Medicine I
Upon successful completion of this course, students will
be eligible to take the National Academy of Sports
Medicine-Certified Personal Trainer (NASM-CPT) exam.
This course builds upon basic knowledge acquired in
Sports Medicine I on topics such as exercise physiology,
biomechanics, exercise program design, and injury
prevention, assessment, treatment, and management.
Students prepare for a career in sports medicine, including
completing an internship. Dual Enrollment option offered
only at WCHS.



# Health and Medical Science Class Descriptions

# Available Certifications

Phlebotomy Technician
ECG Technician
Patient Care Technician
Certified Nurse Aid



#### Nurse Aide I (8360C) Class at BRTC

Grades 11-12; 1.5 Credit; Pre-Requisite: Intro to Health & Medical Sciences 8302; Semester I

Nurse Aide I, offered as an occupational preparation course beginning at the 11th-grade level, is regulated under the Virginia Board of Nursing. It emphasizes the study of nursing occupations as related to the healthcare system.

Students study growth and development across the lifespan, simple body structure and function, and medical terminology. They are introduced to concepts of infection prevention and disease processes. Students receive entry-level skill training in patient nurse aide relationships; measuring and recording of vital signs; cardiopulmonary resuscitation; and general patient care. Work-based learning may be offered as part of this course. The Nurse Aide I course introduces students to careers in nursing, health professions, and STEM-H professions. Students must maintain American Heart Association's Cardiopulmonary Resuscitation (CPR) & Emergency Cardiovascular Care (ECC) training during this course. Recommended prerequisite(s): Introduction to Health and Medical Sciences 8302 Some healthcare facilities may require criminal background checks and drug screens for students participating in a clinical experience. An updated immunization record will be required prior to the student participating in the clinical experience.

#### Nurse Aide II (8362C) Dual Enrolled-Class at BRTC

Grades 11-12; 1.5 Credit; Prerequisite: Nurse Aide I; Semester II

Nurse Aide II is an occupational preparation course emphasizing body systems and diseases as related to advanced clinical care of the acute medical-surgical patient, the chronically ill, and the elderly. Students receive skills training and hands-on clinical experiences in a healthcare setting. Work-based learning in a healthcare facility is part of the course. Students must maintain American Heart Association's Cardiopulmonary Resuscitation (CPR) & Emergency Cardiovascular Care (ECC) training during this course. This course requires students to meet the Virginia Board of Nursing required clock hours to be eligible to take the National Nurse Aide Assessment Program (NNAAP) exam. Additionally, this course includes the approved opiate competencies for health and medical sciences education.

#### Patient Care Technician (8303) Class at BRTC

Grades 12; 1.5 Credit; Prerequisite: Successful completion of Nurse Aide I & II

Offered as an occupational course after the completion of Nurse Aide at the 12th-grade level, Patient Care Technician emphasizes the study of nursing occupations as related to the healthcare system. Students study normal growth and development, simple body structure and function, medical terminology, and are introduced to microbes and disease. Upon completion of the course, students will have mastered the skills needed to perform electrocardiograms (ECGs); execute basic medical, lab, and exam procedures; draw blood; and provide basic patient/client care. Students will be eligible to take the National Certification Exams to become Certified Phlebotomy Technicians, Certified ECG Technicians, and Certified Patient Care Technicians.



# Technology Education Pathways Architectural Drawing and Technical Drawing and Design Design Civil Engineering and Digital Visualization\* Architecture\* Intro to Engineering Design\* Computer Integrated Principles of Engineering Manufacturing\*



Engineering Design & Development\*



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Courses that require a prerequisite are noted with an  $^{*}$ .

# Technology Education Class Descriptions



#### Introduction to Engineering Design (8439C) Class at BRTC

Grades 9-11; 1 Credit; Prerequisite: Passed Algebra I SOL

This pre-engineering course is one of three core courses (along with Principles of Engineering and Digital Electronics) in a national engineering program. Using computer-modeling software, students learn the design process. They solve design problems as they develop, create, and analyze product models. Class located at BRTC

#### Principles of Engineering-PLTW (8441C) Class at BRTC

Grades 10-12; 1 Credit; Prerequisite: Introduction to Engineering Design 8439C

In this Project Lead the Way (PLTW) course, students explore the engineering profession and the fundamental aspects of engineering problem solving. Students study the historical and current impacts of engineering on society, including ethical implications.

Mathematical and scientific concepts will be applied to fundamental engineering topics, including mechanics and electrical-circuit theory. Class located at BRTC

# Technical Drawing & Design (8435C) Class at BRTC

Grades 9-11; 1 Credit; Prerequisite: None

In this foundational course, students design, sketch, and make technical drawings, models, or prototypes of real design problems while learning the language of technical drawing and design. The course introduces the language of graphic communication to science, technology, engineering, and mathematics (STEM) students and is especially recommended for those planning a future in engineering and architecture.

# Architectural Drawing & Design (8437C) Class at BRTC

Grades 10-12; 1 Credit; Prerequisite: None

Students learn the principles of communicating architecture designs and increase their understanding of working drawings and construction techniques learned in Technical Drawing and Design. Experiences include residential and commercial building designs, rendering, model development, and structural detail developments. Students use computer-aided drawing and design (CADD) equipment and established standards or codes to prepare models for presentation. The course is especially beneficial to future architects, interior designers, or home builders.

# Computer Integrated Manufacturing-PLTW (8442) Class PESCAT BRTC

Grades 10-12; 1 Credit; Prerequisite: Intro to Engineering Design 8439C

IIn this specialization course in Project Lead the Way (PLTW), students are taught concepts of robotics and automated manufacturing by creating 3-D designs with computer modeling software and producing computer-controlled models of their designs.

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# Engineering Design & Development (8443C) Class at BRTC

Grades 11-12; 1 Credit; Prerequisite: Principles of Engineering 8441C

In this capstone course in Project Lead the Way (PLTW), teams of students, guided by community mentors, work together to research, design, and construct solutions to engineering problems. Students synthesize knowledge, skills, and abilities through an authentic engineering experience. Students are expected to develop and formally present an independent-study project and a team-oriented project that are critiqued by an evaluation committee.

#### Civil Engineering & Architecture-PLTW (8430C) Class at BRTC

Grades 11-12; 1 Credit; Prerequisite: Intro to Engineering Design 8439C

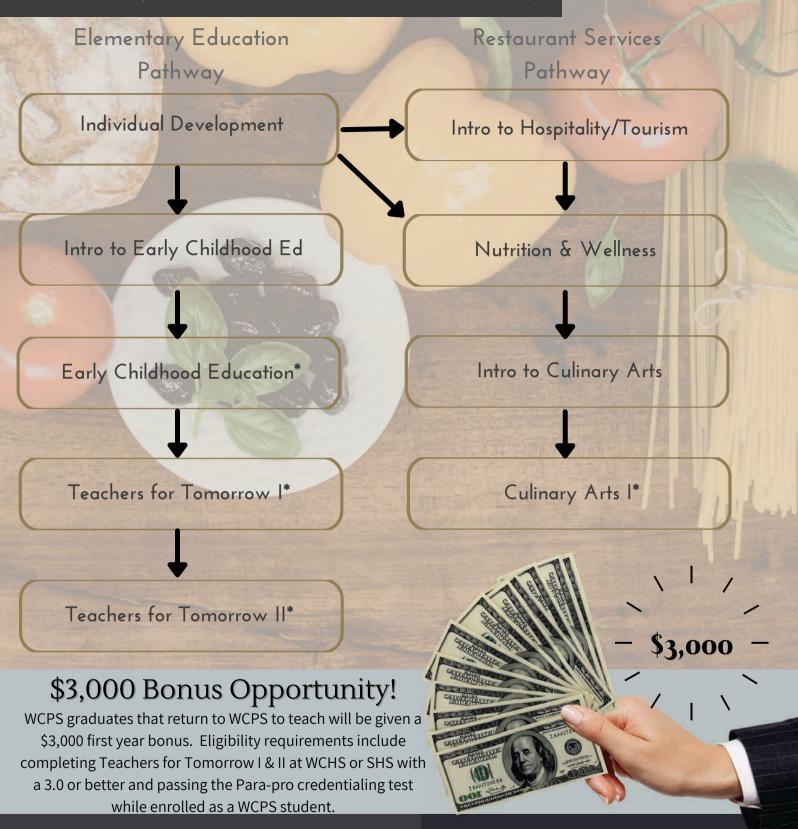
In this specialization course for Project Lead the Way (PLTW), students collaborate on both the development of community-based building and design projects and conceptual design for project presentations.

# Digital Visualization (8276C) Class at BRTC

Grades 10-12; 1 Credit; Prerequisite: Intro to Engineering & Design 8439C

Students gain experiences related to computer animation by using graphics and design concepts. Students solve problems involving 3-D object manipulation, storyboarding, texturing/mapping, lighting concepts, and environmental geometry. Students create a variety of animations that reflect real-world applications and are introduced to interactive and 3-D animation software. Production of a portfolio showcasing examples of original student work is included.

# Family & Consumer Science Pathways





Successful completion of two courses connected by this arrow fulfills the Standard Diploma requirement for two sequential CTE electives.



Courses that require a prerequisite are noted with an \*.

# Family & Consumer Science Class Descriptions

# Nutrition & Wellness (8228) Skyline High School

Grades 9-12; 1 Credit; Prerequisite: None

ready.



#### **Individual Development (8209)**

Grades 9-12; 1 Credit; Prerequisite: None Individual Development students focus on cultivating positive self-esteem; developing skills to build healthy relationships with family, peers, and community members; managing stress and conflict; and preparing to become college- and career-

# Introduction to Early Childhood, Education and Services (8234)

Grades 9-12; 1 Credit; Prerequisite: None
Students are introduced to early childhood education career opportunities and explore topics such as child development, safe and healthy environments for children, and developmentally appropriate practice that supports child development. Leadership opportunities are available through the co-curricular student organization.

# Early Childhood Education and Services I (8285)

Grades 10-12; 1 Credit; Prerequisite: 8234
Students prepare to be primary providers of home-, family-, or institution-based childcare services by focusing on the planning, organizing, and conducting of meaningful play and learning activities; child monitoring and supervision; recordkeeping and referral procedures; and work-based learning experiences in on-site labs, local daycare centers, elementary schools, and other institutions under the supervision of the instructor.

Students also prepare for continuing education leading to careers in early childhood fields (e.g., medical, social services, education).

### Introduction to Hospitality, Tourism & Recreation (8259C)

Grades 9-12; 1 Credit; Prerequisite: None
Students enrolled in Introduction to Hospitality, Tourism, and Recreation focus on developing professional skills and using emerging technologies to prepare for employment in this global industry, rich in diverse career opportunities. The program includes instruction in the industries of lodging, food and beverage, travel and tourism, and recreation and fitness.

# Introduction to Culinary Arts (8249C) Class at BRTC

Grades 10-11; 1 Credit; Prerequisite: None
Introduction to Culinary Arts students investigate food safety and sanitation, culinary preparation foundations, basic culinary skills, diverse cuisines, service styles, nutrition and menu development, and the economics of food. Students also explore postsecondary education options and career opportunities within the food service industry.

# Culinary Arts I (8275C) Class at BRTC

Grades 11-12; 2 Credit; Prerequisite: C or better in Intro to Culinary Arts (8249C)
Culinary Arts I provides students with a foundational understanding of the food service industry and opportunities to build technical skills in food preparation and service. Students examine basic rules of kitchen safety and sanitation, of purchasing and receiving, and of fundamental nutrition. The curriculum incorporates math and science in culinary applications.

#### Virginia Teachers for Tomorrow I and II (9062C/9072C)

Grades 11-12; 1 Credit; Prerequisite: 2.7 GPA as required by the Virginia Department of Education

Virginia Teachers for Tomorrow (VTfT) fosters student interest, understanding, and appreciation of the teaching profession and allows secondary students to explore careers in education. Students build a foundation for teaching; learn the history, structure and governance of teaching; apply professional teaching techniques in the VTfT classroom and field experience; and reflect on their teaching experiences. Additional educational leadership opportunities are offered through the student organization, Educators Rising.

Students in the Virginia Teachers for Tomorrow Program have the option of dual enrollment through Shenandoah University. Tuition fees apply.

# Agriculture Pathways





Animal Science Pathway

Introduction to Animal Systems

7

Plant Science Pathway

Introduction to Plant Systems



Small Animal Care I\*

1

Horticulture Sciences\*



Veterinary Science I\*





All Agriculture students have the opportunity to join the National FFA Organization!

FFA is a dynamic youth organization that changes lives and prepares members for premier leadership, personal growth and career success through agricultural education.

FFA develops members' potential and helps them discover their talent through hands-on experiences, which give members the tools to achieve real-world success.

Members are future chemists, veterinarians, government officials, entrepreneurs, bankers, international business leaders, teachers and premier professionals in many career fields.



Successful completion of two courses connected by this arrow fulfills the Standard Diploma requirement for two sequential CTE electives.



Courses connected by this arrow DO NOT meet the Standard Diploma requirement for two sequential CTE electives.



Courses that require a prerequisite are noted with an \*.

# Agriculture Class Descriptions

### Applied Agricultural Concepts (8073C)

Grades 9-12; 1 Credit; Prerequisite: None

Students develop basic agricultural mechanical skills in the areas of, but not limited to, carpentry, electricity, project design and planning, landscaping and food science. Practical learning experiences will be stressed.



#### Intro to Animal Systems (8008C)

Grades 10-12; 1 Credit; Recommended Pre-Requisite:
Applied Agricultural Concepts

Students develop competencies in each of the major areas of the Animal Systems career pathway including animal nutrition, reproduction, breeding, care, and management. Students also learn agricultural mechanics applicable to animal systems. As with all agricultural courses, students will be exposed to principles of leadership and opportunities within student organizations along with Supervised Agricultural Experience opportunities.

#### Small Animal Care I (8083C)

Grades 10-12; 1 Credit; Prerequisite: Applied Agricultural Concepts or Intro to Animal Systems (8073 or 8008)
Students learn how to care for and manage small animals, focusing on instructional areas in animal health, nutrition, management, reproduction, and evaluation. Course content also includes instruction on the tools, equipment, and facilities for small animal care, and provides activities to foster leadership development. Live animal handling may occur. The National FFA Organization, Supervised Agricultural Experience (SAE), or related student organization activities are encouraged.

#### Veterinary Science I (8088C)

Grades 11-12; 1 Credit; Prerequisite: Small Animal Care I (8083)

Veterinary Science I prepares students for postsecondary education and/or careers in veterinary medicine or related fields. Students develop their skills in anatomy, nutrition, medical terminology, sanitation, clinical exams, and handling animals. Live animal handling may occur. Course content also includes facility maintenance, and office functions, as well as safety practices. The National FFA Organization, Supervised Agricultural Experience (SAE), or related student organization activities are encouraged.

# Introduction to Plant Systems (8007C) Fall Only

Grades 9-10; 1 Credit; Recommended Prerequisite: Applied Agricultural Concepts (8073) Fall Only
Students develop competencies in each of the major areas of the Plant Systems career pathway, including applied botany, plant propagation, and plant care and selection. Instructional content also includes an introduction to the various aspects of the plant systems industry. Students learn agricultural mechanics applicable to plant systems. Additionally, students will be given instruction on the principles of leadership and provided Supervised Agricultural Experience (SAE) opportunities.

#### Horticulture Sciences (8034C)

Grades 10-12; 1 Credit; Prerequisite: Applied Agricultural Concepts or Intro to Plant Systems (8073 or 8008) Rotates bi-annually with Greenhouse This course prepares students for postsecondary educational career programs and entry-level positions in the horticulture industry. Instruction includes safety in the horticulture industry, the science of horticulture and nursery plant production, greenhouse operation and management, landscape design, and turf management. Through hands-on activities, students will identify and manage plant-growing substrates and propagate and grow horticultural plants in the greenhouse and land laboratory.

#### **Green House Production (8035)**

Grades 11-12; 1 Credit; Prerequisite: Horticulture Sciences (8034C) Spring Only

This course prepares students for postsecondary educational career programs and entry-level positions in the greenhouse plant production and management industry. Instruction includes industry safety in greenhouse plant production, development of plant production facilities, greenhouse management and operations, plant identification, the science of plant production, business management, and marketing skills.

# Trade & Industrial Education Pathways

Carpentry	Electricity	Trans- portation Operations	Welding	Law
Technical Drawing & Design	Technical Drawing & Design	Applied Agricultural Concepts	Applied Agricultural Concepts	Computer Info Systems
Architectural Drawing & Design	Architectural Drawing & Design	Automotive Tech I	Technical Drawing & Design	Advanced Computer Info Systems
Building Trades I	Building Trades I	Automotive Tech II	Welding I	Criminal Justice I
Carpentry I	Electricity I		Welding II	Criminal Justice II
Carpentry II	Electricity II			

The pathways above are suggestions, talk to your guidance counselor to discover all available options.

All of the classes listed on this page (except for Applied Agricultural Concepts) are located at BRTC

# Trade & Industrial Education Class Descriptions

# Automotive Technology I (8506C) Class at BRTC

Grades 10-11; 2 Credit; Prerequisite: None
In this course, students explore, handle, and perform basic functions in engine repair, automatic transmission and transaxle, manual drive train and axles, suspension and steering systems, and brakes. Students who successfully complete the Automotive Technology program may be eligible to take the Automotive Service Excellence (ASE) Student Certification examination. The ASE Student Certification is the first step in building a career as a service professional in the automotive industry. Class located at BRTC.

# Automotive Technology II (8507C) Class at BRTC

Grades 11-12; 3 Credit; Prerequisite: Automotive Tech I In this course, students build upon their basic knowledge of automotive technology, exploring more advanced tasks in engine repair, automatic transmission and transaxle, manual drive train and axles, suspension and steering systems, and brakes. They also learn about electrical, electronic, and HVAC systems in automobiles. Upon successful completion of the course, students may be eligible to take the Automotive Service Excellence (ASE) Student Certification examination. Automotive Technology I and II are closely aligned with the 2017 ASE Education Foundation automobile program standards for Maintenance and Light Repair (MLR). Class located at BRTC.

### Welding I (8672C) Dual Enrollment Option-Class at BRTC

Grades 10-12; 1 Credit; Recommended prerequisite: Algebra I and Geometry

Welding is required by a wide variety of industries—anywhere fusible materials and high heat are needed to manufacture, repair, or alter tools and products. Students in Welding I are taught to use manual welding, cutting, and electrical arc welding processes to fabricate and join metal parts according to diagrams, blueprints, and specifications. Students will also learn all safety related practices and techniques, including earning the Occupational Safety and Health Administration (OSHA) 10 card. Class located at BRTC.

## Welding II (8673C) Dual Enrollment Option-Class at BRTC

Grades 11-12; 2 Credit; Prerequisite: Welding I and Instructor Recommendation

This course teaches advanced welding students how to finetune their craft and to perform welds in various positions, using multiple welding processes. Welding is required by a wide variety of 3 industries—anywhere fusible materials and high heat are needed to manufacture, repair, or alter products. Professional welders are in high demand and can earn accordingly. Class located at BRTC.

### Criminal Justice I (8702C) Class at BRTC

Grades 10-11; 1 Credit; Prerequisite: None

Students are introduced to law, public safety, corrections, and security practices. Students examine contemporary issues in the criminal justice system and explore crime scene investigation, criminal investigation, court procedures, policing, and juvenile justice. This course provides a foundation for careers as lawyers, as forensics specialists, and as law enforcement and corrections officers. Class located at BRTC.

### Criminal Justice II (8703C) Class at BRTC

Grades 11-12; 2 Credit; Prerequisite: Criminal Justice I

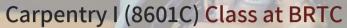
Students apply knowledge learned in Criminal Justice I through practical scenarios involving crime scene investigation, criminal investigation, and crisis intervention. Students explore trends in correctional standards and in identifying and preventing terror threats. This course prepares students for careers as lawyers, forensics specialists, and law enforcement and corrections officers. Class located at BRTC.

# Trade & Industrial Education Class Descriptions

### Building Trades I (8515C)

Grades 10; 1 Credit; Recommended prerequisite: Algebra I and Geometry

Building Trades I introduces students to skills in the four core areas of residential construction: masonry, carpentry, electricity, and plumbing. Students emphasize safety by earning the Occupational Safety and Health Administration (OSHA) 10 card as they build or repair residential structures, using a variety of materials and tools. Students will also learn current residential building codes associated with the trades.



Grades 10-11; 1 Credit; Recommended Prerequisite: Algebra and Geometry

Carpentry I is foundational for achieving high-level construction industry skills that can result in an exciting and lucrative career. With an emphasis on safety, students are taught to use hand and power tools, cut stock, apply construction mathematics, interpret blueprints, and understand basic rigging. Students will become proficient in identifying types of residential construction components to frame walls, floors, ceilings, roofs, doors, and windows. All students will obtain the required Construction Industry OSHA 10 safety credential.

#### Carpentry II (8602C) Class at BRTC

Grades 11-12; 3 Credit; Prerequisite: Carpentry I
Carpentry II prepares students for successful transition into postsecondary education for careers in carpentry and related fields, such as construction management, architecture, and others. Students are taught the safe use of hand and power tools common to the industry to complement their Construction Industry OSHA 10 safety credential earned in Carpentry I. Students will become proficient in assembling and installing various types of residential construction components according to industry standards, including forming foundations, framing floors, walls, ceiling, roofs, trusses, roofing materials, stairs, and exterior doors and windows.

# Carpentry III (8603C) Class at BRTC

Grades 12; 3 Credit; Prerequisite: a grade of C or better in Capentry II and teacher recommendation

Carpentry III is an advanced course that allows students to gain in-depth knowledge and handson experience in construction skills. Students explore specialized areas in carpentry, such as building decks and porches, alternative framing, interior finishes, drywall installation and finishing, as well as energy efficiency and green technology.

Exploration of licensure requirements and entrepreneurial opportunities are emphasized.

#### Electricity I (8533C) Class at BRTC

Grades 10-11; 1 Credit; Recommended prerequisite: Algebra I and Geometry

Students develop fundamental electrical skills to help them prepare for a career in the installation, operation, maintenance, and repair of residential, commercial, and industrial systems. Students will engage in hands-on activities in a lab setting. They will be introduced to residential wiring of houses and apartments; commercial wiring of retailers, schools, businesses, and hospitals; and industrial wiring of factories.

# Electricity II (8534C) Class at BRTC Dual Enrollment Option

Grades 11-12; 2 Credit; Prerequisite: Electricity I
Students will continue to develop skills in the installation, operation, maintenance, and repair of residential, commercial, and industrial electrical systems. Students will also study electrical theory and mathematical problems related to electricity, apply requirements of the National Electrical Code (NEC) Book, select and install conductors, examine lighting, communication, and power systems, and work with conduit and raceways, panelboards, switchboards, grounding systems, and generators.

#### Electricity III (8535C) Class at BRTC

Grades 12; 2 Credit; Prerequisite: Teacher Recommendation and OSHA 10 certification.

Through hands-on experiences, students continue building skills in the installation, operation, maintenance, and repair of electrical systems, with emphasis on industrial applications. They also study lighting fixtures, overcurrent protection, service equipment, motor controls, transformers, grounding, and the National Electrical Code (NEC) Book.

"Electricity III" may be offered as a complement to an existing concentration sequence in any CTE program area. In some instances, where noted, it may be combined with specific courses to create concentration sequences.

# Dual Enrollment Classes Held at Lord Fairfax Community College



# Earn College Credits and Complete the First Year of Your Associate's Degree!

#### Industrial Maintenance Technology I & II (8575C & 8576C)-LFCC

Grade 12; 6 Credit; Application Required-see Guidance Counselor

31 College Credits/Lord Fairfax Community College

**Duration: 36 weeks** 

Prerequisite: Student must have a 2.5 GPA or better and Algebra I. Applicants must have met all requirements for graduation and must take Government and English their senior year. Applicants must have successfully completed one or more of the following:

- Agriculture Concepts (8073)
- Basic Technical Drawing (8435)
- Automotive Technology (8506)
- Electricity (8533 or 8534)
- Carpentry (8601 or 8602)

IMTA is taught at Lord Fairfax Community College. Competitive applications will be accepted in the school division office of Career and Technical Education. Three students total from the high schools will be selected (by committee) to attend the academy based on their application. Transportation is provided from each high school. Students will ride the Governor's school bus and return to their home high school each day, departing at 7:30AM and returning at 11:30AM.

At the successful completion of this one year academy, in addition to high school credit, students will earn 31 college credits and complete a Career Studies Certificate in EPA CFC and Electricity.

IMTA prepares students for living-wage jobs in our community. Students learn skills in welding, HVAC, hydraulics and pneumatics, and electricity that will allow them to work in the engineering department in a large building or industrial facility. Students will also learn skills related to a variety of industrial safety regulations; the use of calipers and micrometers and math conversions for precision measuring/quality control; practice drawing and interpreting technical drawings; and perform a variety of welding and metal work operations.

Students will successfully master all course competencies and upon successful completion of this one-year academy, will be Career and Technical Education Completers in Industrial Maintenance Technician II.

#### Emergency Medical Technician (EMT) Academy-LFCC

833C, 8334C, 6 credits; Grade 12

Prerequisite: Admission to the program is a selective process. The student must be at least 16 years old, have passed their Biology SOL exam, and have a 2.75 GPA. College placement tests must be taken as well Course Description: This one-year program leads to the completion of the first semester of the Associate of Applied Science Degree in Emergency Medical Services at Lord Fairfax Community College and prepares students for certification as a Virginia and/or National Registry EMT.

Expectations: Hold current certification in an Office of Emergency Medical Services approved cardiopulmonary resuscitation (CPR) course at the beginning date of the EMT course.

# CTE Electives by Grade

Courses are listed beside the first grade in which the course is available to students, most courses are available during any following year, with a few exceptions. Year one of some trades courses may not be available to 12th graders. Classes that have a prerequisite are marked by an \*.



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- Intro to Plant Systems--pg 20
- Entrepreneurship Education-pg 6
- Fundamentals of Cyber Security-pg 10
- Computer Information Systems\*-pg 8
- Individual Development-pg 18
- Intro to Early Childhood Education -pg 18
- Principles of Biomedical Sciences-pg 12
- Principles of Business and Marketing-pg 6
- Technical Drawing and Design-pg 16
- Intro to Engineering Design\*-pg 16
- Intro to Hospitality, Tourism and Recreation-pg 18
- Nutrition & Wellness (SHS only)-pg 18
- Intro to Health and Medical Sciences-pg 10& 13
- Marketing-pg 6



- Intro to Animal Systems\*-pg 20
- Small Animal Care I\*-pg 20
- Horticulture Sciences\*-pg 20
- Adv. Computer Information Systems\*-pg 8 •
- Accounting-pg 8
- Programming I\*-pg 10
- Early Childhood Education I-pg 18
- Intro to culinary Arts-pg 18
- Medical Terminology\*-pg 10 & 13
- Human Body Systems\*-pg 12

- Digital Marketing\*-pg 6
- Sports Marketing\*-pg 6
- Architectural Drawing and Design-pg 16
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- Veterinary Science I\*-pg 20
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- Patient Care Tech\*-pg 14
- Sports Medicine/Athletic Training II (WCHS)\*-pg 13
- Emergency Medical Technician (EMT) Academy\* (LFCC)-pg 24
- Biomedical Innovation\*-pg 12
- Carpentry III\*-pg 23
- Electricity III\*-pg 23 Industrial Maintenance & Technology\*-pg 24



# Our Trades Courses Offer Industry Recognized Credentials!

Automotive: Automotive Service Excellence (ASE)

Carpentry: International Code Council (ICC)

Electricity: National Center for Construction education &

Research (NCCER) Level One

Welding: American Welding Society, National Center for Construction Education & Reasearch (NCCER) Level One





#### Blue Ridge Technical Center

280 Luray Avenue Front Royal, Virginia 22630 Main (540) 635-7123 Fax (540) 635-6979

# MEET THE TEACHERS

**Steven Farmer,** our Instructional Assistant comes to us from the University of Michigan where he earned degrees in Graphic Arts & Design and Metal Fabrication. He worked in service and training for Battlefield Ford for 17 years prior to coming to BRTC.

Alex Hutt, J.D., ESQ. Before joining the staff at BRTC, Mr. Hutt was a criminal defense attorney for ten years, the majority of which as a Public Defender. He holds a bachelor's degree in Political Science and a Juris Doctor. A Winchester man by birth, he now lives in Frederick County, MD with his wife, Morgan, and son, Lawson.

**Mat Kidwell**, attended Caldwell Career Center for Carpentry. He then spent 15 years in carpentry building custom homes in the Middleburg and Upperville areas, most recently working for Maidstone Construction. This is his 4th year at BRTC.

**Jacob Leonard,** M.S, B.S., ASC, AutoCAD Certified User, Inventor Certified User. Mr. Leonard has been at BRTC for 4 years. Prior to BRTC he worked in VA at other schools for 12 years in Technology Education and also 10 years in NC teaching Drafting and Design.

Dan Maguschak, after his service as a Navy Engineman Mr. Maguschak worked at Malloy Cadillac & Chevrolet for 19 years. While there he earned his line technician, VA State Inspector and Chevrolet/Buick/Cadillac certifications. He has taught at BRTC for 18 years and is ASE and VA Board of Education certified.

**Darren McKinney**, M.A., B.S., Master Electrician, Master Plumber, Master HVAC, Class A General Contractor. In addition to teaching at BRTC, Mr. McKinney is also a Professor (Adjunct) at LFCC. Mr. McKinney owns and operates a general contracting service for over 20 years with focus on residential, light commercial and industrial HVAC, plumbing, electrical, maintenance, renovation and new construction.

**Brandon Moore,** an RMA graduate, he entered the Welding Industry straight out of high school. He owned his own company and was contracted to do structural welding and fabrication work at the Pentagon, FBI Academy, various embassies and the NASA facilities at Wallops Island. Mr. Moore holds multiple certifications and previously taught at the Department of Corrections, Page County and LFCC before coming to BRTC five years ago.

**Kelly Racey**, B.S. in Biology and PLTW Certifications in Principles of Biomedical Science and Human Body Systems. Mrs. Racey joined BRTC five years ago after 19 years of teaching high school biology and earth science. Prior to teaching, Mrs. Racey worked as a hematology bio-operator and assistant quality assurance scientist for Bayer Corporation for 11 years.

**Russell "Rusty" Sears** is a retired Army Engineer who joined Blue Ridge Tech Center two years ago. Mr. Sears has degrees in biochemistry and construction management and at one point in his career he was responsible for a \$4 billion construction program spread throughout the Middle East.

**Devin Smith,** a WCHS alumnus, Mr. Smith continued his education at both George Mason University (B.S. in Communication) and Baltimore International College (Culinary Arts.) He worked as a chef at the Marriott for five years before beginning his own catering business and opening a restaurant in Front Royal. Mr. Smith has been teaching Culinary Arts at BRTC for 11 years. You can also find him working his catering business and volunteering with various community meal services.

**Tammy Ward**, BSN Nursing from University of South Carolina at Spartanburg, Associates Management from University of Maryland, CPR Instructor certified, OSHA certified. Mrs. Ward brings with her 35 years nursing experience, including 10 years at Blue Ridge Hospice Winchester VA, 5 years medical/surgical nursing at Winchester Medical Center, and 11 years Navy nursing. This is her 5th year at BRTC.

Christina "Tina" White, BSN, RN, PCCN. Mrs. White started at BRTC Fall of `21 after working for 11 years as a nurse, most recently at WMC. Additional training and/or certifications in TCAR, PRN, ACLS, BCLS, NIHSS, and PALS.

#### BLUE RIDGE TECHNICAL CENTER



280 Luray Avenue Front Royal, Virginia 22630 Main (540) 635-7123 Fax (540) 635-6979



# Is BRTC part of the Warren County School System?

Yes! Blue Ridge Technical Center (BRTC) is an extension of both high schools. It serves as the hub for WCPS's Career and Technical Education (CTE) classes. Students from both high schools attend BRTC.

#### What is CTE?

Career and Technical Education (CTE) is the term used for classes that provide students with the academic and technical skills and training necessary to succeed in future careers. CTE programs incorporate math, reading and writing in ways that relate directly to business and industry. While many of Warren County's CTE classes are taught at BRTC, some, like Business, Marketing and Agriculture are taught at SHS and WCHS. In total, about 12.5 million high school and college students are enrolled in CTE across the nation.

#### What does it cost?

Because BRTC offers high quality, hands-on classroom experiences, there are fees associated with the classes. Fees range from \$10-\$25 for most classes. In comparison, many of these same classes and certifications can cost hundreds or even thousands after graduation.

The Nurse Aide program does have fees for required uniforms, drug screening, background checks, and more. A list of these fees are available from the guidance offices and the main office at BRTC.

#### Who are the teachers?

All of our teachers bring at least a decade of workexperience in the fields they teach. All are VA Board of Education certified. Many hold multiple degrees and certifications. We are very proud of the teaching team at BRTC and with good reason. If you want to be the bestlearn from the best!

# How do I sign up for BRTC classes?

The classes at BRTC are very popular, and space is limited. If you are interested in taking a CTE class at BRTC, talk to your guidance counselor about registering for your classes early. Many of our classes require prerequisites and the upper level classes often require instructor approval. If you have questions about class availability or requirements, the teachers are always happy to talk to potential students and can easily be reached by their school email.

# How does BRTC work with my high school?

Think of BRTC as an extension of both SHS and WCHS. Classes at BRTC are intended to complement the classes you are taking at SHS or WCHS. BRTC classes are worth 1-3 credits and are counted toward your GPA and graduation credits just like any other class taken in WCPS. You are encouraged to participate in clubs and activities both at BRTC and your home school. The code of conduct and attendance policies of your home school also apply at BRTC.

#### Is BRTC a trade school?

Yes and No. While we are proud to offer several award winning trade and industry related classes, we offer just as many college prep classes. We also offer several dual-enrollment classes allowing our students to get a head start on their college credits and even earn industry recognized certifications prior to graduating high school.

# How do I get to BRTC from my home school?

Buses transport students to and from SHS and WCHS for each block. BRTC follows the same schedule as the two high schools. Most students travel to BRTC by bus for one block and then return to their home school for their other classes.







