# BURLINGTON TECHNICAL CENTER

https://btc.bsdvt.org/

# Burlington Technical Center Program of Studies 2025 - 2026

# Introduction

Burlington Technical Center (BTC) provides students with the opportunity to explore careers and acquire skills in comprehensive technical programs of study. All students are supported in working toward individual goals through immersive, hands-on learning with highly trained and industry-certified professional instructors, experts in their career fields, in state-of-the-art labs and classrooms, and through experiential learning opportunities. Students will find themselves in a program with peers who are passionate about their learning and want to develop college and career opportunities for themselves after high school.

Our half-day programs are a unique opportunity for students to develop academic knowledge and technical skills in a morning (9:35-11:47 am) or afternoon (12:09-2:21 pm) session while still attending some classes at their sending high school. BTC offers nine technical programs for students in grades 11 and 12 and a one-year exploratory pre-tech program. Most technical programs cover two years of academic work though there is a one-year program (Introduction to Healthcare) that can be attempted in either a student's junior or senior year. Students entering a two-year program in their junior year have the best opportunity to complete program objectives, obtain industry recognized certifications and maximize college crediting. However, students are still eligible to begin two-year programs in their senior year.

BTC programs support students' **Personalized Learning Plan (PLP)** goals, offering **Flexible Pathways** to graduation, careers, and postsecondary education through high school credits, dual enrollment/fast forward/college credits, internships and work-based learning opportunities, and industry recognized credentials and/or licenses.

# **High School Credits/Proficiency**

Students will be awarded three high school credits for each successful year in a BTC program. Students can earn core academic credits which are approved by the Vermont State Board of Education. See individual program descriptions for specific academic and elective credits awarded. BTC also provides a listing of Vermont High School proficiencies that are aligned to each program on the <u>BTC website</u>. Students

successfully completing programs can use the aligned proficiencies to demonstrate academic progress and readiness for graduation.

Student-athletes should be aware that while BTC core academic credits can be applied to Vermont high school graduation requirements, the National Collegiate Athletic Association (NCAA) has not approved their use in the determination of collegiate athletic eligibility. Students who are interested in competing collegiately in either NCAA Division I or Division II sports after high school should work with their sending school counselor to assure the classes they take at their high school while attending BTC will meet the relevant NCAA eligibility requirements.

# **Dual Enrollment/Fast Forward College Credits**

Many BTC programs offer students Dual Enrollment/Fast Forward college credits for free within the program's integrated curriculum. The opportunity to build a college transcript with transferable credits is valuable for students pursuing postsecondary education goals. In addition to the two Dual Enrollment course vouchers that students receive from their sending high school, students may use up to two additional Fast Forward Dual Enrollment course vouchers in every semester that they are enrolled as a BTC student. Fast Forward vouchers are only offered through technical centers.

# **Credentials and Professional Certifications**

All BTC technical (non-pre-tech) programs offer pathways to earn professional certifications, industry-recognized credentials (IRCs) and/or licenses related to their technical fields as students build specialized and transferable skills. IRCs are one way a student can distinguish themselves from their peers in identifying a career pathway and potentially earning a higher wage.

# Work-Based Learning and Cooperative Work Experience (Co-op)

Work-based learning is an educational strategy that provides students with real-life work experiences that enhance and complement their academic instruction. The intent of work-based learning is to have students apply the skills and content knowledge they have learned in their technical programs to real-life employment settings, while simultaneously helping them to develop new skills while working hands-on with professionals and employers in their technical field. The primary goals of work-based learning experiences (WBLE) are to create career awareness, and provide real-world work experience. One important goal of WBLE is to offer invaluable career and work experiences that can help students better decide if the career path they are on is the right one, by exposing the students to a wide variety of occupational opportunities within their chosen program. WBLE puts students into placements where employers are able to observe and provide feedback on a student's skills and work habits.

There are three types of career and work experience opportunities that BTC focuses on:

• Job Shadowing - A student will spend time observing what a typical day is like for someone employed in their field of interest. It is a chance to see what it is actually like to work in a specific job as well as to have the opportunity to ask questions about the job or profession. Job shadowing is an excellent opportunity

to determine if the perception which a student has about a career field is the same as the reality of that job.

- Internship (short-term unpaid career work experience [CWE]) An opportunity for a student to spend a period of time with an employer who is willing to give the student more specific training in their career field. This is a good opportunity for a student to develop more skills, and determine if it is the right job for them.
- Co-Op (long-term paid career technical experience [CTE]) Students with the appropriate skills are paid while working in an actual job, typically during the program's regularly scheduled class time. An excellent opportunity to make money, enhance skills, and build a resume.

In addition to working with employers, students work with BTC's work-based learning coordinator (WBLC) to create industry-standard resumes and cover letters, develop response techniques for being interviewed, learn time-tested methods for making the best first impression, and other skills that will help them secure a job in their field. Educators work with the WBLC to bring in professionals from the community into the classroom to work with students in a variety of ways. WBLE in the classroom can include informational interviews, mentorships, and specialized training from the program's content area.

For more information about BTC Work Based Learning experiences go to the BTC WBL Website <u>https://sites.google.com/bsdvt.org/wbl-btc/wbl-btc</u>.

# **Career and Technical Student Organizations (CTSOs)**

CTSOs are extracurricular groups that enable students in career and technical pathways to further their knowledge and skills by participating in activities, events, and competitions at the regional or national level. CTSOs are designed to offer students experience in leadership, citizenship, and occupational skills.

- HOSA Future Health Professionals: Provides a unique program of leadership development, motivation, and recognition exclusively for secondary students enrolled in health science education and biomedical science programs or have interests in pursuing careers in health professions. HOSA is an international student organization recognized by the U.S. Department of Education and the Health Science Education (HSE) Division of ACTE. HOSA's two-fold mission is to promote career opportunities in the healthcare industry and to enhance the delivery of quality health care to all people. Through the BTC Health Sciences Academy, students have the opportunity to participate in HOSA state and national level competitions.
- **SkillsUSA:** A national CTSO for any student in technical programs. A vital solution to the growing skills gap, SkillsUSA improves the quality of America's skilled workforce through a framework of personal, workplace and technical skills grounded in academics. SkillsUSA enhances the lives and careers of students, instructors and industry representatives as they strive to prepare students for the workforce, higher education and continued community involvement. Students

may have the option to participate in State SkillsUSA competitions in BTC programs. State winners move on to the National Competition.

- Educators Rising: Guides young people on a path from high school through college into teaching careers. By working with aspiring educators who reflect the demographics of their communities and who are passionate about serving those communities through public education, Educators Rising is changing the face of teaching. It provides structured curriculum, competitions for demonstrating skill proficiency, conferences for networking and enhanced learning opportunities, and connection with others who are passionate about the teaching profession.
- National Technical Honor Society (NTHS): The National Technical Honor Society currently serves approximately 100,000 active members and nearly a million members since its inception in 1984. Awarding over \$1.7 million in scholarships to date, NTHS honors the achievements of top Technical Education students, provides scholarships to encourage the pursuit of higher education, and cultivates excellence in today's highly competitive, skilled workforce. BTC students have the opportunity to be inducted into the NTHS to honor student achievement and leadership in career and technical education.

# **Support Services**

School Counseling Support Services: The BTC school counseling coordinator supports a variety of learning needs including, but not limited to academic counseling, college and career planning, PLP and Flexible Pathways integration, and social-emotional wellbeing. The BTC school counseling coordinator collaborates with sending school counselors and other support personnel to assure student needs are addressed.

Student Support Coordinator: BTC has a Special Educator on staff who supports students on plans by communicating with sending schools, teachers, students and families. The Student Support Coordinator attends IEP/504/EST and student planning meetings as a liaison between the home school and BTC. The Student Support Coordinator supports students directly with class support, observation and classroom recommendations, as well as social/emotional check-ins and direct support with skill development.

EL (English Language) Support Services: BTC offers EL students in and out-of-class support, guided study labs, differentiated curriculum, and individualized learning strategies to support academic achievement and help students work toward their personal, academic, and career goals.

Academic Interventionist: BTC has an academic interventionist who pushes into class in order to support students with direct classroom skills including reteach, scaffolding and extension in order to support all students within the program.

Paraeducator: BTC has one paraprofessional who also pushes into classrooms as needed in order to provide students with direct hands-on support of classroom material, social/emotional check-ins and implementation of accommodations as necessary.

# How to Apply / Admission Requirements

All interested students should complete the following items:

- Visit BTC in person to learn more about a program of interest. Students can visit either during a designated in-school visit day or at an evening/weekend information event. Speak to your school counselor about the in-school visit opportunity or check the BTC website (<u>btc.bsdvt.org</u>) or call 802-864-8426 for after-school visit dates/times.
- Meet with your School Counselor to discuss your interest in a BTC program. Your counselor will help you consider how this opportunity aligns with your Personalized Learning Plan. They will also discuss scheduling considerations and how to assure you stay on track for graduation.
- 3. Complete an application by the specified deadline which is noted on the BTC website (<u>btc.bsdvt.org</u>). When you submit your application, your school counseling team will be prompted to review it and upload relevant information that is required for you to be considered for admission.\* Students are required to be in good academic standing and on-track to graduate with their 9th grade cohort.\*\*
- 4. Complete an interview with the BTC program instructor. The program instructor will reach out to all qualified applicants and set up an interview, either in-person, via phone or video call.
- 5. BTC will notify school counselors of admissions decisions.

Questions? Please contact James Yepez, School Counseling Coordinator jyepez@bsdvt.org

\*Grades, attendance & discipline information will be considered as a factor in acceptance decisions.

\*\*Applicants who are not currently on track for graduation with their class group may be reviewed on a case-by-case basis.

## Automotive Science and Technology I (Grade 11 or 12) Automotive Science and Technology II (Grade 12)

#### HS Credits for 2 Year Program

- Year 1 2.0 Elective, 0.5 Science, 0.5 English
- Year 2 2.0 Elective, 0.5 Science, 0.5 English

**Program Description:** This rigorous curriculum is designed to prepare students for college and career opportunities. Common Core and National Science standards are an integral part of the automotive curriculum; subsequently, students study scientific principles as they're applied to the design, operation, and service of a modern automobile.

Students will learn how engines work, troubleshoot common engine problems and fuel system issues, and analyze and complete vehicle manufacture repair algorithms. Students disassemble a modern vehicle engine, use micrometers and dial indicators to measure engine components, build and test electrical circuits, complete basic vehicle maintenance procedures, and operate machinery associated with lifting a car, changing/balancing tires and performing wheel alignments.

#### Credentials, certifications, work-based learning and leadership opportunities:

- Credentials and certifications:
  - Tire Industry Association Automotive Tire Service
  - Valvoline Motor Oil Basics
  - S/P2:
    - Automotive Service Safety
    - Automotive Service Pollution Prevention
    - Ethics and YOU in the Automotive Industry
    - Land That Job: Interview Skills for Automotive Students
  - ASE: Automotive Service E-Learning, Student Certification
- CTSO: SkillsUSA, National Technical Honor Society
- College credits: Qualified students may be eligible to earn articulated college credits at the following institutions: Lakes Region Community College, NH; Lincoln Technical Institute, CT; and University of Northwestern Ohio.

**Program Outcomes:** While a large percentage of graduates pursue further education and careers associated with the automotive industry, others have utilized the electro-mechanical knowledge and skills acquired in the program to begin successful careers in related areas.

# Indicators of a Successful Student

• Experience in Algebra

- Reading/writing at grade level for industry tests and manuals
- High attention to detail
- Strong work ethic
- Strong attendance record
- Capable of working both independently and as part of a team
- Have a Personalized Learning Plan that reflects an interest in Automotive Science & Technology
- Strong desire to be successful in the Automotive Science & Technology learning environment

# **Application Requirements**

- Visit the program site by the application deadline. This can be done either during an in-school field trip scheduled through your school counseling office or by attending an after-school information session.
- Complete and submit a BTC application by the application deadline.
- Participate in an interview with the program instructor.

# Aviation and Aerospace Technology I (Grade 11 or 12) Aviation and Aerospace Technology II (Grade 12)

#### HS Credits for 2 Year Program

- Year 1 1.0 Elective, 1.0 Science, 1.0 Math
- Year 2 1.0 Elective, 1.0 Science, 1.0 Math

**Program Description:** This program is a highly technical and multidisciplinary curriculum that teaches students not only how aircraft work, but how to troubleshoot, inspect and maintain those aircraft. Units include everything from math and physics, to more aviation-specific subjects like corrosion control, aircraft hardware, flight surfaces, as well as Federal Aviation Administration (FAA) rules and regulations. We blend classroom theory with plenty of hands-on practical experience in order to prepare our students for a future in aviation. Students learn about hand tools and how to properly use them, disassemble and reassemble piston and turbine engines, learn the basics of welding, and even how to run an aircraft on the ground.

- Credentials and certifications: FAA Mechanic Certificate with Airframe & Powerplant (A&P) ratings.
- Work-based learning: Internships available at various local aviation companies during the summer months and/ or post-secondary school year
- CTSO: NTHS, SkillsUSA
- College credits: Students completing an FAA A&P certification through BTC can be awarded with two-thirds of the college credits required to complete VTSU's Associates degree in Aviation Maintenance Technology.

**Program Outcomes:** Graduates from the BTC Aviation and Aerospace Technology program have the option of attending our postsecondary program at the Burlington airport to con tinue their training and obtain their Airframe and Power plant Mechanic Certificate. Students who complete their A&P certification with BTC are credited with two-thirds of the requirements for the VTSU Associates Degree in Aviation Maintenance Tech and only need 20 more credits to complete their degree. Aircraft mechanics are currently in high demand all throughout the country with starting wages in the \$25-35/hr range.

# Indicators of a Successful Student

- Experience in Algebra, Geometry, and some beginning Trigonometry
- Have a Personalized Learning Plan that reflects an interest in Aviation & Aerospace Tech
- Strong desire to be successful in the Aviation & Aerospace Technology learning environment
- Strong attendance record

# **Application Requirements**

- Visit the program site by the application deadline. This can be done either during an in-school field trip scheduled through your school counseling office or by attending an after-school information session.
- Complete and submit a BTC application by the application deadline.
- Participate in an interview with the program instructor.

# Design and Illustration I (Grade 11) Design and Illustration II (Grade 12)

#### **HS Credits for 2 Year Program**

- Year 1 1.5 Elective, 1.0 Art, 0.5 English
- Year 2 1.5 Elective, 1.0 Art, 0.5 English

**Program description:** The Design & Illustration program pushes art students to become masters in visual creative problem solving and self expression by immersing them in a wide array of traditional studio and digital mediums.

Students study graphic design on an iMac loaded with Adobe Creative Cloud software (all students get personal full Adobe Creative Cloud accounts for the two years of the program). They work towards mastering drawing and painting in our figure drawing and still life studio. They screen print multi-color posters and shirts in our screen printing space, and they learn to take professional portraits and fine art photographs with DSLR cameras. Students also learn digital painting and animation using Wacom Cintiq tablets. Design & Illustration will expose students to artist-grade and industry-recognized mediums while helping them build their strongest portfolio for applying to schools, or to continue their artistic practices in life after high school. A special focus of the second year is portfolio development, and includes our yearly trip to National Portfolio Day in Boston.

Design & Illustration provides students with a community of artists to share ideas and work collaboratively with on projects. Students are encouraged and supported in entering work into competitions and local art show opportunities.

# Credentials, certifications, work-based learning and leadership opportunities:

- Work-based learning: Partnership with Burlington City Arts
- CTSO: NTHS
- College credits:
  - Digital Animation (3) CCV
  - Digital Photography I (3) CCV
  - Drawing I (3) CCV
  - Graphic Design I (3) CCV
  - Introduction to Adobe Creative Cloud (3) CCV
  - Introduction to Drawing (3) RVCC
  - Printmaking I (3) CCV

**Program Outcomes:** Many students attend prestigious art schools and liberal arts schools, earning merit scholarships for their portfolios. Some students enter the workforce directly. Former students currently attend: Rhode Island School of Design, Parsons School of Design, Pratt College of Art, School of the Art Institute of Chicago, Maine College of Art and Design, MassArt, Savannah College of Art and Design, Rochester Institute of Technology, and Syracuse University Visual Performing Arts.

# Indicators of a Successful Student

- 9th grade reading level
- Strong interest in developing artistic abilities
- Strong attendance record
- Willingness to work both independently and in group settings
- Have a Personalized Learning Plan that reflects an interest in Design & Illustration
- Strong desire to be successful in the Design & Illustration learning environment

# **Application Requirements**

- Successful completion of Art 1 or similar foundational art class.
- Visit the program site by the application deadline. This can be done either during an in-school field trip scheduled through your school counseling office or by attending an after-school information session.
- Complete and submit a BTC application by the application deadline.
- Participate in an interview with the program instructor.
- Examples of 5-10 pieces of artwork must be submitted to the program instructor by the interview date so they may be discussed during the interview.

## HS Credits for 2-Year Program

- Year 1 1.0 Elective, 1.0 Science, 1.0 Math
- Year 2 1.0 Elective, 1.0 Science, 1.0 Math

**Program Description:** Students in this program will learn the fundamental aspects of manufacturing, engineering, and design processes through both academic and hands-on work. Class projects are specifically designed to build the students' ability to conceptualize, design, and create a product, as well as evaluate the entire process. Knowledge acquired includes:

- Precision measurement (imperial and metric)
- Technical Drawing: 2D and 3D
- Design and drawing for production: 2D and 3D
- 21st century manufacturing: lasers, CNC milling, 3D printing, water jet machining
- The design process and problem solving through engineering
- Soldering and introductory electrical engineering

# Credentials, certifications, work-based learning and leadership opportunities:

- Credentials and certifications:
  - Vermont Fundamentals of Lean Manufacturing
  - OSHA 10
  - AutoCAD (2D)
  - Fusion (3D)
- CTSO: NTHS, SkillsUSA

**Program Outcomes:** Students completing this program may choose to continue on to 2- and 4-year college programs studying design and engineering technologies including: industrial design; environmental design and engineering, structural and mechanical design and engineering, and product design. Students may also opt to enter the workforce directly and can find employment as machine operators or technicians, computer-aided design (CAD) and computer-aided machining (CAM) operators, and fabrication specialists.

#### Indicators of a Successful Student

- Strong math skills
- Motivation to work in the engineering fields
- Strong attendance record
- Ability to work both independently and cooperatively in groups
- Have a Personalized Learning Plan that reflects an interest in Engineering
- Strong desire to be successful in the Advanced Manufacturing and Engineering learning environment

#### **Application Requirements**

- Successful completion of one year of high school algebra.
- Visit the program site by the application deadline. This can be done either during an in-school field trip scheduled through your school counseling office or by attending an after-school information session.

- Complete and submit a BTC application by the application deadline.
- Participate in an interview with the program instructor.

# Digital Media Lab I (Grade 11) Digital Media Lab II (Grade 12)

# HS Credits for 2 Year Program

- Year 1 1.0 Elective, 1.0 Art, 0.5 English, 0.5 Science
- Year 2 1.0 Elective, 1.0 Art, 0.5 English, 0.5 Science

**Program Description:** Attention creatives (music producers, fashion/art photographers, music video, content creators, and indie filmmakers) - the Digital Media Lab (DML) is the place to take your passions to the next level, with industry standard tools, opportunities to collaborate with peers, perform, network, and exhibit your work in the community, and the support to master your craft! Whether it's digital film making, audio production, digital photography, podcasting, VFX or other emerging digital media, the DML gives students introductory instruction and on-going support as they evolve their understanding of digital media into projects for exhibition and performance. DML students get hands-on experience with extensive tools and resources, including our iMac lab with Adobe Creative Suite, DaVinci Resolve, Black Magic Cinema cameras, DSLR cameras, audio controllers, drones, gimbals, musical instruments, drum machines/samplers, and industry standard DAWS (including Ableton, Logic, FL Studio, and Pro Tools). This evolving set of tools gives students a strong foundation to develop the understanding and technical skills necessary to grow as media producers. DML is a collaborative environment where creative, ambitious students thrive in a project based curriculum, with opportunities for independent-focused work that aids in developing their artistic voice and vision. DML students are encouraged to enter film festivals and contests, release music on all platforms, participate in after-school open studios and film clubs, and promote and exhibit their work in screenings and through live performances.

- Credentials and certifications:
  - Adobe Photoshop
  - Adobe Premiere Pro
- Work-based learning: Partnership with Future Fields Studios, The Media Factory, Vermont Production Collective, and AALV
- CTSO: NTHS
- College credits:
  - Digital Filmmaking I (3) CCV
  - Digital Filmmaking II (3) CCV
  - Digital Photography I (3) CCV
  - Introduction to Adobe Creative Cloud (3) CCV
  - Introduction to Technology in Music (3) CCV

- Motion Graphics (3) CCV
- Storytelling Through Media (3) CCV

**Program Outcomes:** Students from this program pursue degrees from competitive colleges and universities in a wide range of areas including: Filmmaking, Music Production, Communications, and Motion Graphics. Our recent graduates have been accepted to Berklee College of Music, Syracuse University, Full Sail University, Emerson College, Columbia College Chicago, Concordia University, Wesleyan University, Savannah College of the Arts, Pratt Institute, Drexel University, Minneapolis College of Art and Design, University of Vermont, and Champlain College. Upon completion from the program, DML students have also found success creating photos for brands and commissioned portraits, produced music, music videos, and performed in venues throughout the world.

# Indicators of a Successful Student

- Experience with technology strongly recommended for this program
- Strong attendance record
- Strong interest in developing artistic abilities
- Independent and ability to work with minimal supervision in collaborative groups
- Have a Personalized Learning Plan that reflects an interest in Digital Media
- Strong desire to be successful in the Digital Media Lab learning environment

# **Application Requirements**

- Visit the program site by the application deadline. This can be done either during an in-school field trip scheduled through your school counseling office or by attending an after-school information session.
- Complete and submit a BTC application by the application deadline.
- Participate in an interview with the program instructor.
- Submission of examples of prior work in digital media strongly suggested.

# Education Training & Leadership I (Grade 11 or 12) Education Training & Leadership II (Grade 12)

#### **HS Credits for 2 Year Program**

- Year 1 1.0 Elective, 1.0 Social Studies, 1.0 English
- Year 2 1.0 Elective, 1.0 Social Studies, 1.0 English

**Program Description:** The Education Training and Leadership program prepares students for careers in a wide variety of educational and community settings. Students who complete this two-year program will be equipped to pursue various careers in education, ranging from early childhood development to administrative and leadership positions - and other helping professions - such as counselors, advocates, and community professionals. Our innovative, grow-your-own educator model provides students with the flexibility to pursue their chosen pathway within the field through meaningful, hands-on experience at Edmunds Elementary School, Edmunds Middle School, and at participating K-12 schools and other community partners throughout Chittenden County.

Credentials, certifications, work-based learning and leadership opportunities:

- Credentials and certifications:
  - American Red Cross:
    - Adult, Infant and Child CPR
    - First Aid
    - Automated External Defibrillator
    - Bloodborne Pathogens
  - Mandated Reporter
  - Paraeducator (State of Vermont)
- CTSO: Educators Rising, SkillsUSA, NTHS
- College credits:
  - Human Development (3) RVCC
  - Supportive Communication Skills (3) RVCC
  - Foundations of Early Childhood Education (3) RVCC
  - Curriculum for Early Childhood Care and Education (3) RVCC
  - Children with Special Needs & Their Families (3) RVCC

**Program Outcomes:** Some students go directly into the workforce, while other students go on to colleges/universities to pursue degrees in fields such as psychology, education, leadership, social work, and community outreach. Universities include: UVM, Keene State College, Bishop's University, Saint Michael's College, Endicott College, Boston University, Castleton University, Johnson & Wales University, Vermont State University, Champlain College, Bowdoin College, and Southern NH University.

# Indicators of a Successful Student

- Experience working with children
- Experience using Google and Microsoft Office applications
- Motivated, self-driven
- Strong attendance record
- Have a Personalized Learning Plan that reflects an interest in Human Services
- Strong desire to be successful in the educational and human services learning environment

# **Application Requirements**

- Visit the program site by the application deadline. This can be done either during an in-school field trip scheduled through your school counseling office or by attending an after-school information session.
- Complete and submit a BTC application by the application deadline.
- Participate in an interview with the program instructor.

# Health Sciences Academy I (Grade 11) Health Sciences Academy II (Grade 12)

HS Credits for 2 Year Program

• Year 1 - 1.0 Elective, 1.0 Science, 1.0 Social Studies

• Year 2 - 1.5 Elective, 1.0 Science, 0.5 Health

**Program Description:** This program immerses students in rigorous academics (anatomy and physiology, medical terminology, and lifespan developmental psychology), practical applications (medical assessment techniques, such as vital signs, reflex testing, diagnostic lab testing), and experiential learning (including dissections, clinical job-shadowing, simulated patient experiences, and mock job interviews). Students also have the option senior year to choose a track to pursue national certification either in phlebotomy (CPT) or emergency medical technician (NREMT). Students are provided with guidance in the college application process and will also complete a workplace skills unit, geared toward careers in health care, including job applications, resumes, cover letters, and practice interviews with UVM Medical Center recruiting system.

# Credentials, certifications, work-based learning and leadership opportunities:

- Credentials and certifications:
  - Emergency Medical Technician
  - Phlebotomy Technician
  - American Heart Association:
    - Adult, Infant and Child CPR
    - Automated External Defibrillator
    - Bloodborne Pathogens
    - Medical Ethics

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- CTSO: HOSA-Future Health Professionals, NTHS
- WBL and leadership: Partnership with UVM Medical Center
- College credits:
  - Anatomy & Physiology I (4) VTSU
  - Anatomy & Physiology II (4) VTSU
  - Human Biology (3) RVCC
  - Introduction to Healthcare (3) CCV
  - Lifespan Developmental Psychology (3) VTSU
  - Medical Terminology (3) RVCC

**Program Outcomes:** 95+% of our students go on to rigorous college programs at competitive colleges such as Cornell University, Brown University, Northeastern University, Rochester Institute of Technology, and University of Vermont, and have successfully earned degrees as health care professionals in a variety of fields.

#### Indicators of a Successful Student

- Strong biology skills
- Motivation to work in the health science fields
- Strong attendance record
- Ability to work both independently and cooperatively in groups
- Have a Personalized Learning Plan that reflects an interest in Health Sciences

• Strong desire to be successful in the Health Sciences Academy learning environment

# **Application Requirements**

- Successful completion of one year of high school biology.
- Visit the program site by the application deadline. This can be done either during an in-school field trip scheduled through your school counseling office or by attending an after-school information session.
- Complete and submit a BTC application by the application deadline.
- Participate in an interview with the program instructor.
- Rising seniors who have not participated in Health Science Academy I may apply to join Health Science Academy II directly if space is available. To be considered, students must meet the aforementioned application requirements and must also have either completed or have a plan to complete a college-level Anatomy & Physiology I course with a grade of C+ or better prior to the start of their senior year.

# Homeland Security & Criminal Justice I (Grade 11 or 12) Homeland Security & Criminal Justice II (Grade 12)

# HS Credits for 2 Year Program

- Year 1 1.5 Elective, 1.0 Social Studies, 0.5 Science
- Year 2 1.5 Elective, 1.0 Social Studies, 0.5 Science

**Program Description:** In the Homeland Security and Criminal Justice program, students will be introduced to a variety of fields related to law enforcement, corrections, forensics, homeland security, emergency preparedness, juvenile justice, victim services and law. Students will gain insight into the ethical and legal obligations that will guide their conduct as future professionals in their field of interest. Site visits, guest speakers, the use of industry specific equipment, simulated crime scenes, and real-world scenarios will not only enhance classroom learning, but increase the foundational knowledge and skills needed to tackle the needs of a changing world. Student learning culminates in the application of technical skills at state-wide competitions and through participation in nationwide campaigns allowing them to strengthen their practical skills and competencies.

- Credentials and certifications:
  - American Red Cross
    - Adult, Infant and Child CPR
    - First Aid
    - Automated External Defibrillator
- CTSO: SkillsUSA, NTHS, YMCA Youth and Government
- WBL and leadership: Partnerships with local, state, and federal law enforcement agencies, Air National Guard Security Forces, Transportation Security

Administration, Armed Forces, and Champlain College

- College credits:
  - Forensics & Crime Scene Investigation (3) CCV
  - Introduction to Criminal Justice (3) CCV
  - Law Enforcement in America (3) CCV

**Program Outcomes:** Program graduates go on to pursue degrees in Criminal Justice, Forensics, Psychology, Cybersecurity, Emergency Management, and Law. Others have entered the workforce directly and are employed in local police departments, United States military services, and Homeland Security.

# Indicators of a Successful Student

- Strong English skills required for extensive research, organization, and writing
- Basic computer and software proficiency (Microsoft and Google products)
- Strong attendance record
- Have a Personalized Learning Plan that reflects an interest in Criminal Justice
- Strong desire to be successful in the Criminal Justice learning environment

# **Application Requirements**

- Visit the program site by the application deadline. This can be done either during an in-school field trip scheduled through your school counseling office or by attending an after-school information session.
- Complete and submit a BTC application by the application deadline.
- Participate in an interview with the program instructor.

# Introduction to Healthcare (Grade 11 or 12)

HS Credits for 1 Year: 0.5 Elective, 1.0 Science, 1.0 English, 0.5 Health

**Program Description:** A one-year training initiative that equips students with essential skills for a successful healthcare career. Upon completion, students will be ready to enter the workforce as Licensed Nursing Assistants (LNAs) or continue their education in various healthcare disciplines. This program emphasizes a strong foundation in anatomy and physiology, serving as the basis for experiential learning. Students will participate in dissections, skills training in a simulated hospital environment, and practice medical assessment techniques such as vital signs measurement, blood glucose testing, and comprehensive head-to-toe assessments.

In addition to classroom learning, students will tour the major departments at UVM Med Center. In the spring, they will gain valuable clinical experience through 32 patient care hours at a local skilled nursing facility. The program also prepares students for future employment by creating a professional portfolio, participating in mock interviews, and engaging in national competitions (HOSA) to enhance their clinical skills.

- Credentials and certifications:
  - Licensed Nursing Assistant
  - Personal Care Assistant (PCA)
  - American Red Cross:
    - Adult, Infant and Child CPR
    - Automated External Defibrillator
    - First Aid
    - Bloodborne Pathogens
- CTSO: HOSA
- College credits:
  - Human Biology (3.0) CCV
  - Introduction to Healthcare (3.0) CCV

**Program Outcomes:** Students will be able to go directly to work as personal care assistants (PCAs) as well as being prepared to take the LNA exam (administered by the State of Vermont). Once licensed, they will be sought after candidates for employment at healthcare facilities throughout Vermont. Students will be prepared to pursue additional healthcare training or pursue a college education.

#### Indicators of a Successful Student

- Strong reading skills to comprehend safety policies and procedures
- Strong attendance record
- Have a Personalized Learning Plan that reflects an interest in Health related fields
- Strong desire to be successful in the Healthcare learning environment

#### **Application Requirements**

- Successful completion of one year of high school biology
- Visit the program site by the application deadline. This can be done either during an in-school field trip scheduled through your school counseling office or by attending an after-school information session.
- Complete and submit a BTC application by the application deadline.
- Participate in an interview with the program instructor.

# Pre-tech Innovation, Technology & Design (Grade 9 or 10)

HS Credits for 1 Year Program: 1.0 Science, 1.0 English, 1.0 Math

**Program Description:** <u>The BTC pre-tech program is located at CVU High School and therefore only students in the CVUSD attendance boundary are currently eligible to participate.</u> The pre-tech program is designed to provide 9th and 10th grade students with a unique experience in a collaborative makerspace environment where they explore technology, innovation, and entrepreneurship. Students progress through multiple modules in Technology & Application of Science including: Structural and Mechanical Design/ Fabrication, Information Technology, Web & Digital

Communications, and Visual Art. Each module consists of a variety of projects that are designed to help students develop their knowledge of 2D and 3D design, rapid prototyping, communication, problem solving, data analysis, and critical thinking skills. Throughout this course, students have access to a variety of resources including traditional hand tools, power tools, and computer controlled equipment such as a vinyl cutter, 3D printers, CNC routers, and a laser cutter. In addition, they will be introduced to mechatronics through the design and fabrication of a computer (Arduino) controlled mechanical system. This program can advance student preparation for 11th and 12th grade tech programs as well as employment in the trades and introductory college courses in engineering and design.

#### Indicators of a Successful Student

- 8th grade reading level
- Ability to perform basic math (addition, subtraction, multiplication, division)
- Ability to take measurements using fractions, decimals, and percentages
- An innate interest in making things and hands-on work
- Curiosity about how things work and a drive to solve problems
- Have a Personalized Learning Plan that reflects an interest in CTE programming
- Strong desire to be successful in the pre-tech learning environment

#### Requirements

- Live in the Champlain Valley Union School District attendance boundary or be accepted to attend Champlain Valley Union High School as an out-of-district student during the program year.
- Visit the program site by the application deadline. This can be done either during an in-school field trip scheduled through your school counseling office or by attending an after-school information session.
- Complete and submit a BTC application by the application deadline.
- Participate in an interview with the program instructor.

# **Equal Employment Opportunity and Non-Discrimination Statement**

Applicants for admission and employment, students, parents, employees, sources of referral of applicants for admission and employment, and all unions or professional organizations holding collective bargaining or professional agreements with the Burlington School District are hereby notified that it is the intent of the Burlington Board of School Commissioners that the District will not discriminate against employees and/or applicants for employment, students or other designated beneficiaries of the statutes listed below on the basis of race, sex, gender (including but not limited to pregnancy and parental status), color, age, creed, religion, disability, handicap, ancestry, place of birth, national origin, marital status, political affiliation, sexual orientation, gender identity or gender expression in any of its employment and education practices, policies, procedures or decisions or in the operation of, access to, participation in, benefit of or admission to its programs, activities, services and facilities and that it will provide equal access to the Boy Scouts of America and other designated youth groups in compliance with and to the extent provided by the laws listed below. Pursuant to the §504 of the Rehabilitation Act of 1973, the Board will take positive steps to employ and advance in employment qualified handicapped persons in programs receiving federal assistance under the Education of the handicapped Act (Individual with Disabilites Education Act) and make reasonable accommodations to the known physical or mental limitations of the qualified handicapped applicant or employees regarding requests for reasonable accommodations, including provisions for undue hardship.

The District's Title VI Coordinator, the Age Discrimination Act Coordinator and Americans with Disabilities Act Coordinator for employees and others is Ze Susan Anderson-Brown, Human Resources Director, Burlington School District (802) 864-2159; 1-800-253-0191 TDD; The District's Title IX Coordinator for employees, students, parents and other such relatives, friends, guest speakers or visitors is Henri Sparks, Director of Equity, Burlington School District (802) 864-8411; 1-800-253-0191 TDD. The District's Americans with Disabilities Act Coordinator for students and §504 Coordinator is the Director of Student Support Services of the Burlington School District (802) 864-8456; 1-800-253-0191 TDD

Burlington Technical Center – 29 Church Street, LL, Burlington, VT 05401 802-864-8426-phone 802-864-8521-fax <u>https://btc.bsdvt.org/</u>