



BVT

Transforming Education

SOMETIMES A SPARK IS ALL YOU NEED...



At BVT you'll learn to...

- work with your hands, mind, and heart
- pursue your passion
- explore new worlds
- look closely and see differently
- create a little magic
- find your voice
- develop meaningful connections
- forge bonds across communities
- make a difference
- shape your future

It only takes one spark to light a fire inside you. What's your spark?

Today's youth have the world at their fingertips; the challenge is helping our students recognize and apply the myriad of information available to them. At Blackstone Valley Tech, we are embracing the challenge, opening doors, and following our passions to transform everyday inquiries into learning opportunities. Our students, faculty, and staff have made a commitment to excellence and thrive in a culture of high expectations. While our learning environment is continually updated to keep pace with modern industry, the timeless tools of creativity, collaboration, and a competitive edge are blended to shape a view of learning not as a chore, but as an opportunity to excel. Our goal is to ensure your teen has no limits in their achievement by providing them with rigorous programs, integrated academics, and technical skills that will empower them to embark on lucrative careers and ignite a lifelong love of learning.

welcome...

Our community has become an oasis of opportunity for students. For more than fifty years, we have empowered generations of students to maximize their potential by placing them on exciting career paths. The countless careers available to today's youth make exploring these opportunities early in their life a vital part of your teen's educational and career planning. On behalf of everyone at Blackstone Valley Tech, I thank and commend you for your interest in the life-changing value of a vocational-technical education.



Dr. Michael F. Fitzpatrick
Superintendent-Director

YOU'LL SHARE IDEAS, SUPPORT AND ENCOURAGE
EACH OTHER, AND DEVELOP FRIENDSHIPS FOR LIFE



Making the decision to attend a vocational technical high school might just be one of the most important decisions of your life thus far! But how do you know whether BVT is right for you?

It's simple, really. Start by answering these questions:

- Do you love a good challenge?
- Do you learn best when your hands, mind, and heart work together?
- Are you open to new ideas, working collaboratively, and listening intently?
- Are you ready to expand your outlook and make meaningful connections within a unique community?
- Do you believe it's never too soon to begin planning your future?

If your answer to any of these questions is an enthusiastic "YES!" we'd love to hear from you. Take some time to browse through this view book and read about our 18 exciting career vocational technical programs and rigorous academic offerings. See how many extracurricular activities are available to help you develop your interests, fuel your passion, make new friends, and have fun!

To learn more about BVT, check out our website: www.valleytech.k12.ma.us or join us for an informational tour of our campus in November of each year (see page 50).



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meaningful connections

Our Mission

To create a positive learning community built on respect and kindness for all that prepares our students for personal and professional success in an internationally competitive society through a fusion of rigorous vocational, technical, and academic skills.

Transforming Education is not just our tagline; it has been a part of our culture for upwards of 30 years. Ask anyone who has visited our campus, and they'll tell you that there's something in the air. Walk down our hallways and observe our teachers and students at work. You'll feel the renewed energy of our collective commitment to embracing new learning models that create happy, healthy, and successful futures for our students.

Long gone are the days of passive lectures and isolated study. Today, our learning models are centered on "integration" — the fusion of academic and career technical learning. We're implementing "cross-curricular challenges" that require our students to apply theory learned in mathematics, language arts, science, and social studies to solve workplace/life problems encountered in their career vocational technical shops. This interactive, inquiry-based learning groups students together for peer discussion, discovery, and instruction under the watchful eye and expert guidance of their teachers. Our students learn from and challenge one another. Creating a learning experience that is customized, connected, amplified, and relevant.

Our Core Values

- **Professionalism:** Conduct ourselves with integrity and work to generate positive outcomes.
- **Respect & Responsibility:** Treat everyone with the respect they deserve and empower each other to create an ideal learning environment.
- **Innovation & Adaptability:** Develop skills that allow for lifelong learning and strive for constant improvement.
- **Diversity, Equity & Inclusion:** Embrace diversity to foster personal growth and celebrate each other's individuality and uniqueness.
- **Emotional, Physical & Social Wellness:** Seek opportunities that enrich our lives with shared experiences that allow us to nurture our well-being.

Our Learning Expectations

We believe that all of our students are capable of acquiring high-level vocational, technical, and academic skills regardless of background and using those skills to add positive and productive value to professional, social, and civic pursuits. Our graduates will be able to demonstrate professional behavior, utilize technology purposefully, communicate effectively in multiple modalities, and work collaboratively.

As freshmen, you will immerse yourself in BVT's culture of respect and high expectations and begin to bridge the gap between where you've been and where you're going. Embracing this change will be rewarding and challenging, but you will find your new friends, teachers, and mentors supporting you along the way. From the first day of school and Freshmen Exploratory to extracurricular activities like our Homecoming and the Color Run, your time at BVT marks the beginning of an exciting journey.

Freshmen Exploratory

Freshmen are introduced to several career pathways by immersing themselves in a different vocational program every other week from late August to early December. Students learn to research career pathways concerning future earning potential, working conditions, and industry trends. Exploring their interests and aptitudes, students learn how those factors will impact future job satisfaction. Our school counselors and Career Enrichment teachers present a variety of factors for students to consider when making their final decision about what career program they want to choose for the duration of their high school career.

Students and their parents/guardians are encouraged to enter the Freshman Exploratory program with open minds and a willingness to challenge any assumptions they might have regarding our vocational-technical offerings. Often during the exploratory process many students fall in love with a shop that was not among their initial top-three choices, which means our exploratory process is working!

Our Career Enrichment classes assist our freshmen and their families to view our school counselors, teachers, and vocational instructors as partners and resources in developing a career plan that reflects the student's vision of their future career. Throughout the exploratory experience, instructors evaluate each student based upon a rubric/scoring guide utilized by all vocational areas. In this process, students learn to assess their exploratory scores from the previous shop week.

As the seven exploratory cycles conclude, freshmen and their parents complete an online Decide Survey, submitting their 1st through 7th choice for shop placement. Final placement is determined by student request and performance in accordance with our state-approved admissions policy. Annually, there are a handful of students who do not receive their first, second, or third choice of career program. Those students receive support to identify a shop they would be happy in until an opening occurs in their desired career pathway. In the spring, all freshmen complete an online survey about their current shop placement. We work with those students who indicate they desire a shop change. These changes will take place over the summer once attrition and retention have been determined and as space is available.



“*When I came to BVT I quickly found a home and my voice. It has given me opportunities to grow from a follower to a leader. I am proud to be a member of the Beaver family.*”

— Curtis Rondeau, Class of 2024



“Automotive Collision has taught me many skills that will help me throughout my life. I have learned problem solving skills along with a good work ethic that I wouldn't have learned in a traditional school system. The close knit friendships and personal experiences have made me grow as a person and restored my love of learning.”

— Sophie Pigeon, Class of 2018

automotive

Our Automotive Collision Repair & Refinishing program provides a detail-minded student with the technical knowledge and skills, character, and work ethic necessary to begin a rewarding career in this fast-paced, high-tech industry. The dynamic and challenging curriculum provides students an excellent opportunity to work on both “live” and training vehicles with cosmetic and severe structural damage. In the process, students hone their skills in welding, cutting, surface preparation, painting, refinishing, plastic repair, abrasives, solvents, and estimation. The curriculum also includes a basic introduction to automotive mechanical and electrical systems. Our state-of-the-art virtual painting program allows students to practice painting and refinishing techniques in an eco-friendly learning environment. Graduates are eligible for one year of credit toward the two-year work requirement necessary for Automotive Service Excellence (ASE) collision repair technician certification.

Skills you'll learn:

- Damage analysis
- Welding and cutting
- Plastic repair
- Painting and refinishing
- Structural and non-structural repair
- Mechanical and electrical introduction
- System diagnostics
- Cost projections and project management

Certificates you'll earn:

- OSHA 10-hour Card: General Industry
- Respirator Safety
- Automotive Service Excellence (ASE)
- NATEF Accredited Master Collision Repair Technology Program

Hands-on Project: Estimating Collision Repairs

Business skills are just as crucial to the successful operation of a collision repair center as the technical skills required to complete the project. Our students learn to write estimates because the initial diagnosis, documentation, and discovery of unforeseen damage all have financial impacts on both the car owner and the technician. By writing estimates for community members' vehicles, our students reinforce their knowledge of car models and parts, trade terminology, and the labor involved in a variety of collision projects. Their proper knowledge, coupled with their financial aptitude from creating invoices and ordering and inventorying parts, assure their success in the field.



TECHNICAL & PROFESSIONAL CAREERS

Automotive Collision Repair & Refinishing

DIRECT ENTRY INTO WORKFORCE

- Apprentice collision repair employee
- Automotive glass installer
- Automotive restoration business
- Industrial painter
- Sales representative for paint/supply company

Starting Salary: \$40,000

POST-SECONDARY CERTIFICATE/LICENSE

- Advanced collision repair
- Insurance appraiser
- Insurance adjuster
- Auto/truck dealership employee
- Collision repair shop owner

Starting Salary: \$56,000

UNIVERSITY DEGREE

- Insurance appraiser
- Insurance adjuster
- Auto/truck dealership management
- Automotive designer

Starting Salary: \$75,000

JOB GROWTH

Employment in the auto collision and repair industry is projected to grow 8% from 2016 to 2026, as fast as the average for all occupations.

TECHNICAL & PROFESSIONAL CAREERS

Automotive Technology

DIRECT ENTRY INTO WORKFORCE

- Entry level auto service technician
- Service writer
- Parts department representative
- Dealership associate
- Technical sales

Starting Salary: \$35,000

POST-SECONDARY CERTIFICATE/LICENSE

- Automotive design engineering
- Diesel engineering technician
- General and service manager
- Engineering technician
- Research and development technician

Starting Salary: \$45,000

UNIVERSITY DEGREE

- Automotive design engineer
- Mechanical engineer
- Manufacturing engineer
- Insurance underwriter
- Research and development engineer

Starting Salary: \$70,000

JOB GROWTH

Employment in the auto technology industry is projected to grow 6% from 2016 to 2026, as fast as the average for all occupations.

The Automotive Technology program is approved by the National Automotive Technical Education Foundation to train students to repair and maintain modern industry vehicles. Students who enjoy hands-on problem-solving will value the extensive mechanical, electrical, and electronic service performance skills acquired by working on “live” and training vehicles. Our Automotive Technology lab is a technologically rich environment with sophisticated tools required for electronic diagnostics and repair of domestic and foreign vehicles. Graduates are eligible for one year of credit toward the two-year work requirement for Automotive Service Excellence (ASE) automotive technician certification.

Skills you'll learn:

- Vehicle maintenance
- Electronic diagnostics and repair
- Air conditioning diagnostics and repair
- Servicing the brake, fuel, exhaust, and suspension systems
- Service writing, billing, parts ordering, and inventory control
- Rebuilding transmissions and circuits
- Introduction to diesel engines

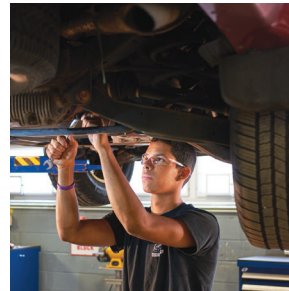
Certificates you'll earn:

- OSHA 10-hour Card: General Industry
- National Automotive Student Skills Standards Assessment (NA3SA)
- Automotive Service Excellence (ASE)
- NATEF Accredited Master Automotive Service Technology Program

Hands-on Project: Engine Rebuild

Do you know how to build a three-dimensional puzzle with hundreds of pieces? Our Automotive Technology students do. They embrace the complicated process of rebuilding an engine by taking on the intense research, planning, and preparation needed to be successful. After completely disassembling an eight-cylinder engine, our students take measurements, complete calculations, and determine part functions.

Once they have everything set, they begin working with gauge measurements, electrical connections, seals, gaskets, water pumps, and valves to reassemble a functioning engine. A comprehensive inspection ensures it's operational.



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“Automotive Technology has made me a leader and taught me how to work with my hands. When I first came into shop, I didn't know anything about cars, and now I'm confident in my career and with helping my peers.”

— Morgan O'Brien,
Class of 2018



technology



YOU'LL LEARN TO WORK HARD,
LISTEN INTENTLY, AND IN THE
PROCESS, BE YOURSELF

Our Culinary Arts program is for students who consider themselves enthusiastic foodies and enjoy pairing new and unique flavors and food combinations. In this program, students learn to multi-task, listen carefully, and communicate clearly as they develop the proficiency, knowledge, and skills necessary for success in the food, beverage, and hospitality industry. Students gain authentic food preparation and hospitality skills as they learn to operate our on-campus, full-service *Three Seasons Restaurant*, which is open to the public throughout the school year. Experience in the planning and production of our annual Superintendent's Gourmet Dinner and other high-visibility catering opportunities such as trade shows, community functions, and historic events is invaluable.

Skills you'll learn:

- Food preparation
- Cooking methods
- Fundamentals of baking
- Cake decorating
- Sanitation procedures
- Purchasing and quality control
- Duties of host/hostess and wait staff
- Restaurant management
- Introduction to food science and nutrition
- Dietary/health

Certificates you'll earn:

- OSHA 10-hour Card: General Industry
- Massachusetts allergen awareness
- Serv Safe™ Sanitation Manager
- Serv Safe™ Alcohol Service

Hands-on Project: Create a Restaurant

Many of our aspiring chefs want to own and operate a restaurant that engages people through delicious food, top-tier service, and a comfortable atmosphere. Our juniors will learn the process of creating an entirely new restaurant through the Create a Restaurant project. Using their hospitality industry knowledge, students work in small groups to create and present a restaurant concept to potential investors. The students create the restaurant floor plan and craft a business plan that highlights the restaurant name, marketing logo, hours and days of operation, and printed menu. The written and oral project allows our students to utilize the skills and methods of an effective presentation learned through observing and discussing numerous culinary school demonstrations.



Culinary Arts

TECHNICAL & PROFESSIONAL CAREERS

Culinary Arts

DIRECT ENTRY INTO WORKFORCE

- Food & beverage service
- Sous chef
- Assistant pastry chef
- Cake designer
- Dietary aide

Starting Salary: \$30,000

POST-SECONDARY CERTIFICATE/LICENSE

- Manager of a food service, banquet, restaurant, or bakery
- Caterer
- Chef
- Food service sales representative
- Food writer or food critic
- Sommelier
- Food photographer

Starting Salary: \$45,000

UNIVERSITY DEGREE

- Dietician/Nutritionist
- Executive chef
- Hotel/restaurant management
- Food scientist
- Food technologist

Starting Salary: \$65,000

JOB GROWTH

Employment in the food and beverage industry is projected to grow 10% from 2016 to 2026, faster than the average for all occupations.

TECHNICAL & PROFESSIONAL CAREERS

Dental Assisting

DIRECT ENTRY INTO WORKFORCE

- Dental assistant
- Dental office receptionist
- Insurance claims processor
- Dental lab tech assistant

Starting Salary: \$41,000

POST-SECONDARY CERTIFICATE/LICENSE

- Dental product representative
- Dental laboratory technician
- X-ray technician
- Dental office manager
- Registered dental hygienist (AS)

Starting Salary: \$70,000

UNIVERSITY DEGREE

- Registered dental hygienist (BS)
- Public health career
- Financial coordinator
- Entry into dental graduate program

Starting Salary: \$85,000

JOB GROWTH

Employment in the dental assisting industry is projected to grow 19% from 2016 to 2026, much faster than the average for all occupations.

The Dental Assisting program is an exciting career path for the student who enjoys the challenges and rewards of working with people and has the desire to join the growing health and dental industries. Students are exposed to oral health care and services through practice in our state-of-the-art dental assisting lab, as well as clinical experience at Central Massachusetts dental offices and clinics. Students also gain a deeper understanding of patient care by studying anatomy and physiology, with an emphasis on head, neck, oral, and dental anatomy. In-depth preparation for Dental Assisting licensure is a natural launching pad for a well-paid career in the dental field.

Skills you'll learn:

- Dental laboratory procedures and techniques
- Pre- and post-operative patient care and instruction
- Management of medical and dental emergencies
- Radiographic procedures and techniques
- Infection control and sterilization
- Dental business office procedures
- Four-handed dentistry
- Dental charting

Certificates you'll earn:

- OSHA 10-hour Card: General Industry
- Dental Assisting National Board Certification in Infection Control Exam (ICE) and Radiation Health and Safety (RHS)
- CPR
- First Aid

Hands-on Project: Watch Your Mouth

What better way to display your knowledge than to teach others! The Dental Assisting program partners with local middle schools to provide educational opportunities for learners of all ages. Our sophomores give informational presentations to middle school students within the community on dentistry-related topics such as good oral hygiene, the effects of tobacco, taking care of braces, and tooth whitening. The interactive presentations help our students learn new ways of speaking with patients and explaining care plans.



“

“Through Dental Assisting I have learned the importance of empathy towards those around me, and a desire to brighten another’s day with something as simple as a smile.”

— Julia Tutela, Class of 2018



“BVT has taken my passions and turned them into a reality by enhancing my skills and giving me the tools necessary to becoming a caring, educated, and competent nurse.”

— Samantha Drew, Registered Nurse, St. Camillus Health Center, Class of 2014, PN Class of 2017

With the focus on developing nursing skills, Health Services is the ideal program for the outgoing, compassionate student interested in entering the growing field of health care. With patient care a top priority, students receive instruction in anatomy and physiology, growth and development, medical terminology, aging, infectious disease, mental health, and nutrition. Clinical experiences at area hospitals and facilities expose students to the health care worker’s role in long-term care, acute care, rehabilitation, Alzheimer’s, hospice care, and working with those with developmental disabilities. The Massachusetts Department of Public Health has approved the Nursing Assistant preparation components of the program that allows qualified and eager students to take the certifying exam at the end of their junior year.

Skills you’ll learn:

- Nursing skills
- Caring for people throughout the life cycle
- Nutrition and special diets
- Medical terminology
- Pharmacy technician
- Medical billing and coding
- Communication
- Safety measures

Certificates you’ll earn:

- OSHA 10-hour Card: General Industry
- Cardiopulmonary Resuscitation (CPR)/ Automatic Defibrillator (AED)
- Introduction to Pharmacy Technician
- Alzheimer’s and Dementia Sensitivity Training
- Certified Nursing Assistant (CNA)
- Home Health Aide (HHA)
- Introduction to Electrocardiograms (EKG)
- Nutrition Assistant
- First Aid

Hands-on Project: Clinical Experience

Translating classroom knowledge into practical experience is an essential step for our Health Services students. Through partnerships with area hospitals and healthcare facilities, including Milford Regional Medical Center and Westborough HealthCare, our students experience a variety of clinical environments. By participating in clinical rotations, our seniors practice their advanced care skills in acute care units such as cardiac and telemetry. In these controlled environments and under the supervision of instructors and hospital staff, they perform daily care functions such as range of motion, vital signs, transfers, and personal care for patients.



TECHNICAL & PROFESSIONAL CAREERS Health Services

DIRECT ENTRY INTO WORKFORCE

- Nursing assistant
- Dietary aide
- Home health aide
- Clinical laboratory technician
- Pharmacy technician

Starting Salary: \$35,000

POST-SECONDARY CERTIFICATE/LICENSE

- EKG technician
- X-ray technician
- Medical assistant
- Registered nurse (RN) ASN
- Pharmacy technician
- Surgical technician
- Physical therapy assistant

Starting Salary: \$55,000

UNIVERSITY DEGREE

- Physical therapist
- Registered nurse (RN) BSN
- Social worker
- Occupational therapist
- Speech pathologist
- Dietician

Starting Salary: \$85,000

JOB GROWTH

Employment in the health care industry is projected to grow 18% from 2016 to 2026, much faster than the average for all occupations.

TECHNICAL & PROFESSIONAL CAREERS

Cosmetology

DIRECT ENTRY INTO WORKFORCE

- Hairdresser/salon stylist
- Hair color specialist
- Skin care specialist/esthetician
- Nail technician
- Beauty consultant

Starting Salary: \$30,000

POST-SECONDARY CERTIFICATE/LICENSE

- Salon manager/owner
- Makeup artist
- Hairstylist for TV, movies, or theater
- Research technician
- Retail specialist

Starting Salary: \$45,000

UNIVERSITY DEGREE

- Cosmetic buyer
- Fantasy/special effects makeup artist
- Cosmetic chemist
- Beauty editor
- Styles director/artistic director

Starting Salary: \$80,000

JOB GROWTH

Employment in the cosmetology industry is projected to grow 12% from 2016 to 2026, faster than the average for all occupations.

Fashion-forward, self-expressive students who appreciate beauty will be interested in our Cosmetology program, which will train them for licensing and employment in the salon and spa industry. In this client-oriented environment, students learn to apply and sharpen their technical, managerial, and interpersonal skills by training and working in the stylish *Salon at BVT*, which is open to the public throughout the school year. Instruction in human anatomy and physiology provides students with a deeper understanding of the scientific aspects of hair, skin, and nail care. After 1,000 hours of instruction, students are eligible to take the state cosmetology license exam.

Skills you'll learn:

- Hair styling and shampooing techniques
- Hair coloring and cutting
- Chemical texture services
- Sanitation procedures
- Nail care
- Facials and makeup application
- Salon business management

Certificates you'll earn:

- OSHA 10-hour Card: General Industry
- Beauty Pros International Hair Extension Certification
- Commonwealth of MA Division of Professional Licensure (*Licensed Registered Cosmetologist*)
- Global Keratin Certification
- Special Effects Makeup Certification

Hands-on Project: Entrepreneurship

The best salons are ones that elevate their customer experience above the simple and straightforward to the luxurious and trendy. Our seniors use their background managing the *Salon at BVT* to create a mock salon through this entrepreneurial project. The students begin this cross-curricular project by selecting a location, researching local bylaws, and crafting a business plan that highlights the salon name, logo, hours of operation, offered services, and prices. They then work with students from other shops to help design their business cards and brochures and create a model of their salon.



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“BVT was the BEST decision that I have ever made. Between the amazing education and the extensive hands-on practical experience in the salon, I had complete confidence immediately pursuing my career out of school.”

— Nicole LaFrance, Hair and Makeup Artist,
Owner of LaFrance Glam Artistry,
Class of 2010



“My experience in the field as a Biomedical Engineer has exposed me to everything from the development of next-generation spinal devices to the development of new drug therapies for novel diseases that impact our day-to-day lives. The ability to start this track in high school can set you apart from others looking to enter a competitive field or apply to college-level Biotechnology programs.”

— Michael Jacene, Senior Director,
Head of Medical Device Sector
Compliance Strategy & Analytics,
Johnson & Johnson Company

bio



Do you have an inquisitive mind, learn quickly, and like to solve complex problems? If so, our Biotechnology program is right for you. Come, and explore the science and interplay of living organisms, their components for human benefit, and the technical applications used to turn biological knowledge into products. Curious students passionate about biology, chemistry, mathematics, computer science, and engineering will enjoy exploring this interdisciplinary field. Working with their instructor, students learn about scientific theory and technical training, resulting in a broad range of industry and academic research skills relevant to the emerging demand in today's dynamic workplace. Ultimately, this program prepares students for scientifically diverse careers in the biotechnology and pharmaceutical industries, one of the fastest-growing commercial sectors, with Massachusetts being a significant center for growth and innovation in this field.

Skills you'll learn:

- Genetic engineering and cloning
- Genetically modified organisms
- Bacterial cell culture and transformation
- Mammalian cell culture and transfection
- Gel electrophoresis (nucleic acids and proteins)
- Industry-grade instrumentation
- Gene therapy
- Bioethics
- Forensic techniques
- Bioinformatics
- Regulatory affairs
- Independent research

Certificates you'll earn:

- OSHA 10-hour Card: Health
- AHA CPR/First-Aid
- PLTW Certifications
- NOCTI

Hands-on Project: Crime Scene Investigators

Forensics has become an important and exciting discipline in science, often capturing worldwide attention. Our freshmen discover what it's like to be a crime scene investigator while learning the science behind evidence analysis. Putting their skills and logic to the test, teams of students create mock crime scenes to solve: Who did it? How did they do it? And Why? Students use fluorescent fingerprint powder and a black light source to analyze fingerprints as they investigate staged crime scenes. They learn to identify hairs and fibers from different sources and evaluate fake bloodstain patterns to reconstruct the events. Interactions with the State Police Crime Lab reveal behind-the-scenes realities of working in the field.

TECHNICAL & PROFESSIONAL CAREERS

Biotechnology

DIRECT ENTRY INTO WORKFORCE

- Laboratory assistant
- Laboratory associate
- Biomanufacturing technician
- Animal care technician

Starting Salary: \$40,000

POST-SECONDARY CERTIFICATE/LICENSE

- Scientific technician
- Clinical research associate
- Environment health & safety
- Quality control technician

Starting Salary: \$50,000

UNIVERSITY DEGREE

- Biomedical engineer
- Research scientist
- Clinical trial professional
- Forensic scientist

Starting Salary: \$80,000

JOB GROWTH

Employment in the biotechnology industry is projected to grow 21.5% from 2017 to 2026, faster than the average for all occupations.

TECHNICAL & PROFESSIONAL CAREERS

Engineering & Robotics

DIRECT ENTRY INTO WORKFORCE

- Process/Systems analyst
- Assistant project manager
- Product designer
- CAD technician
- Engineering technician

Starting Salary: \$35,000

POST-SECONDARY
CERTIFICATE/LICENSE

- Business
- Mechatronics
- Environmental science
- Robotics
- Interior design
- Renewable energy

Starting Salary: \$50,000

UNIVERSITY DEGREE

- Electrical and computer engineer
- Mechanical, industrial, and robotics engineer
- Civil and architectural engineer
- Aerospace engineer
- Management and organizational leadership

Starting Salary: \$75,000

JOB GROWTH

Employment in the engineering industry is expected to grow 9% from 2016 to 2026, as fast as the average for all occupations.

The Engineering & Robotics program will interest those students who not only think outside the box but want to redesign the box entirely. Students will explore an advanced curriculum focused on mechanical, electrical, civil, and aerospace engineering. Using our state-of-the-art engineering lab, complete with the latest in 3D printers, a wind tunnel, and structural analysis equipment, students learn to develop their critical thinking and problem-solving skills. Working with the end goal in mind, students enjoy collaborating with classmates from our other programs on school projects and in robotics competitions. This course of study offers a complete experience for students wishing to pursue a post-secondary degree in a STEM-related field and for those planning to join the workforce after high school.

Skills you'll learn:

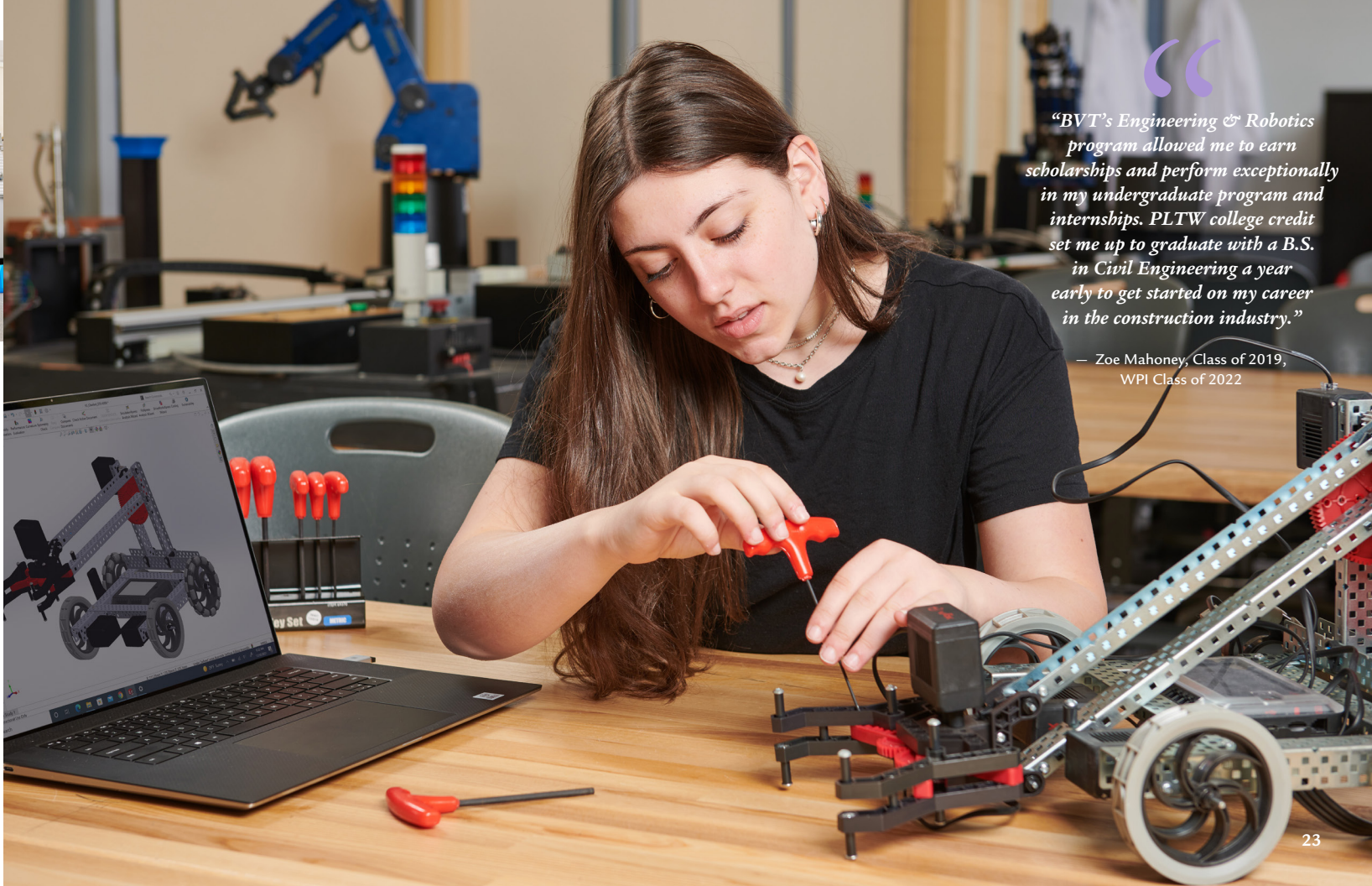
- Aerospace engineering
- Principles of engineering across multiple disciplines
- Mechanisms, materials, and alternative energy
- Computer integrated manufacturing
- Robotic automation and programming
- Civil and architectural engineering
- Engineering design process
- Project management and lifecycle
- Computer-aided design and modeling
- Digital electronics

Certificates you'll earn:

- OSHA 10-hour Card: General Industry
- Autodesk Inventor Certified User Certificate
- Certified SolidWorks Associate Certificate
- Autodesk Revit User Certificate
- Six Sigma White Belt Certificate

Hands-on Project: Aerospace Engineering

Our nation's fascination for flight and outer space has grown with the popularity of commercial aviation, civilian drones, and the newly-created space tourism industry. Our seniors explore the principles of flight and its history while learning about the contributing factors to navigating the earth's atmosphere. Students further explore the principles of lift and drag while designing airfoils in CAD for simulation and airflow testing by 3D printing their designs and using different angles of attack in the lab's wind tunnel.



“BVT’s Engineering & Robotics program allowed me to earn scholarships and perform exceptionally in my undergraduate program and internships. PLTW college credit set me up to graduate with a B.S. in Civil Engineering a year early to get started on my career in the construction industry.”

— Zoe Mahoney, Class of 2019,
WPI Class of 2022

engineering



YOU'LL GET HANDS-ON
EXPERIENCE THAT SPARKS
CREATIVITY AND INNOVATION

man

The student who enjoys teamwork, has an eye for detail, and has strengths in math, science, and art will find success in Advanced Manufacturing & Fabrication. This program provides students with a solid foundation in machining, metal fabrication, and welding disciplines. Through a combination of presentations, live customer projects, and advanced laboratory simulations, students learn to program and operate manual and computerized numerical control (CNC) equipment. By working closely with other programs to determine process variables and develop solutions, students acquire the collaborative skills necessary for success in modern manufacturing. With a shortage of skilled workers in the advanced manufacturing field, our graduates have many employment and post-secondary opportunities from which to choose.

Skills you'll learn:

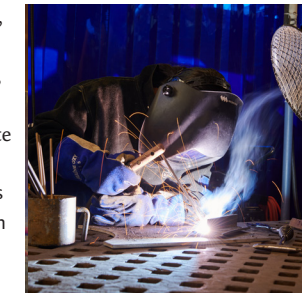
- Mathematical and scientific principles of manufacturing
- Multiprocess welding (shielded metal, gas metal arc, gas tungsten arc, oxyacetylene, and plasma)
- CNC equipment operation (computer numerical control lathes, millers, and plasma cutters)
- CAD/CAM operations (computer-aided design/computer-aided manufacturing)
- Turning and milling
- Welding and metal fabrication

Certificates you'll earn:

- OSHA 10-hour Card: General Industry
- Manufacturing Advancement Center Workforce Innovation Collaborative
- American Welding Society

Hands-on Project: CNC Machine

With a nationwide push to bring American-made products back to store shelves, it's important to give our students the skills and experience needed to work with the machinery used in manufacturing those very products. Students will complete projects from concept to product while honing their skills on the Computer Numerical Control machines designed to cut materials like aluminum, plastics, steel, and more. Through hands-on projects, students will learn the elements of high value-added manufacturing concepts such as blueprint interpretation, CNC programming, precision measuring, and safe setup and operation of equipment.



TECHNICAL & PROFESSIONAL CAREERS

Advanced Manufacturing & Fabrication

DIRECT ENTRY INTO WORKFORCE

- Entry level machinist
- Fabricator
- Welder
- Certified welding inspector
- Quality control inspector

Starting Salary: \$35,000

POST-SECONDARY CERTIFICATE/LICENSE

- Tool and die machinist
- CNC programmer
- Production engineer
- Quality control engineer
- Supervisor

Starting Salary: \$52,000

UNIVERSITY DEGREE

- Mechanical engineer
- Metallurgist
- Welding engineer

Starting Salary: \$70,000

JOB GROWTH

Employment in the manufacturing industry is expected to grow 6% from 2016 to 2026, as fast as the average for all occupations.

TECHNICAL & PROFESSIONAL CAREERS

Multimedia Communications

DIRECT ENTRY INTO WORKFORCE

- Digital print operator
- Web and copy designer
- Production manager
- Digital photographer
- Customer service personnel

Starting Salary: \$35,000

POST-SECONDARY CERTIFICATE/LICENSE

- Graphic designer
- Art director
- Digital workflow manager
- Video designer and producer

Starting Salary: \$45,000

UNIVERSITY DEGREE

- Graphic designer/illustrator
- Web designer and programmer
- User experience designer
- User interface designer
- Animation
- Movie director/producer
- Advertising and marketing
- Fashion and textile design

Starting Salary: \$65,000

JOB GROWTH

Employment in the multimedia communications industry is projected to grow 6% from 2016 to 2026, as fast as the average for all occupations.

Students with a passion for showcasing their creativity and visually communicating their ideas will be instantly drawn to Multimedia Communications. Going beyond the traditional print and television model, students learn to stretch their imagination and combine text, color, images, audio, video, and animation to create meaningful, targeted messages that engage and inspire the audience to act. The curriculum emphasizes design, strategic marketing, and media across a wide range of platforms while allowing students the opportunity to work on real-world projects and interact with clients in our Design & Print Center.

Skills you'll learn:

- Graphic design
- Website design and development
- Digital photography
- Advertising and marketing
- Business and entrepreneurship
- Video design and production
- User experience designer
- Animation

Certificates you'll earn:

- OSHA 10-hour Card: General Industry
- Adobe Certified Associate

Hands-on Project: Infographics

If you've ever flipped through a magazine or browsed Pinterest, you've seen an infographic. The purpose of an infographic is simple: engage your audience with a visual representation of your message. Although the intention is simple, creating an infographic can be difficult as designers must present complex information quickly and clearly. Our juniors flex their creative muscles and put their skills to the test by designing an infographic poster and motion graphic on a topic of their choice. The students must utilize their knowledge of the ways people see and interpret patterns and trends to make a compelling project that improves their audience's reception and cognition of the topic. The project is an opportunity for students to immerse themselves in Adobe Illustrator and After Effects programs.



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“Having the opportunity to work with real clients on projects within the community provided me with a portfolio that I was able to take with me upon graduation and use to get accepted into college and am now pursuing my BFA in Graphic Design. The knowledge and skills I learned while in Multimedia Communications have set me ahead of my college classmates.”

— Rachel DeWolfe, studying Graphic Design at Plymouth State University, Class of 2016



YOU'LL LEARN TO FRAME
PROBING QUESTIONS AND
FIND UNEXPECTED ANSWERS

The curious student who enjoys taking things apart just to see how they work will surely excel in **Electronics & Engineering Technology**. Students receive training in a well-equipped, modern electronics laboratory while studying a broad spectrum of electronic and engineering theory and application of basic electronics, communications, digital circuits, and computer systems. From iPads® and cell phones to personal computers, students learn to master the high-demand skills needed to build the electronic circuits that drive these devices. Developing an innovative approach to design and working with the end-user in mind are the keys to success in this highly technical field.

Skills you'll learn:

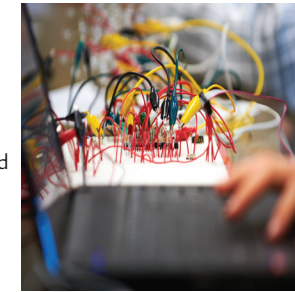
- Electronic measuring equipment
- Electronic components identification
- Electronic design
- Electronic repair/equipment
- Computer software and hardware
- Digital design AC/DC theories
- Op-amp design
- Semiconductors design
- Develop engineering documents
- Software applications
- Design an autonomous robotics system

Certificates you'll earn:

- OSHA 10-hour Card: General Industry
- Associate Electronic Technician (CET)

Hands-on Project: Digital Clock

"How does it work?" is a common question our students ask themselves as they take things apart and put them back together to satisfy their curiosity. Our electronics students combine their inquisitiveness with logic and theory to create an LED digital clock. The clock design is etched into several circuit boards that incorporate transistors, resistors, and capacitors. The clock is powered by building a microcontroller and soldering its connections. Once the electronic components are complete, students program their clock with the date and time.



TECHNICAL & PROFESSIONAL CAREERS

Electronics & Engineering Technology

DIRECT ENTRY INTO WORKFORCE

- Electronic technician
- Computer technician
- Electronic salesperson
- Printed circuit layout technician
- Data communications technician
- Computer repair/setup
- Electronic board repair
- Fiber optics service technician

Starting Salary: \$50,000

POST-SECONDARY CERTIFICATE/LICENSE

- Network support technician
- Design electronic technician
- Integrated circuit fabricator
- Telecommunication service technician
- Broadcast & communications systems

Starting Salary: \$60,000

UNIVERSITY DEGREE

- Electronics engineer
- Computer engineer
- Electronics research engineer
- Mechanical engineer
- Electrical engineer

Starting Salary: \$75,000

JOB GROWTH

Employment in the electronics industry is expected to grow 7% from 2016 to 2026, as fast as the average for all occupations.

electronics

TECHNICAL & PROFESSIONAL CAREERS

Drafting & Design Technology

2-Year Program for Juniors & Seniors

DIRECT ENTRY INTO WORKFORCE

- Mechanical and architectural draftsman
- CAD draftsman
- Technical support
- Documentation control

Starting Salary: \$45,000

POST-SECONDARY CERTIFICATE/LICENSE

- Mechanical designer
- Architectural manager
- CAD designer
- Engineering technician
- Drafting supervisor

Starting Salary: \$55,000

UNIVERSITY DEGREE

- Mechanical engineer
- Architectural director
- Architect
- Industrial and manufacturing engineer
- Civil engineer

Starting Salary: \$75,000

JOB GROWTH

Employment in the drafting industry is projected to grow 7% from 2016 to 2026, as fast as the average for all occupations.

Our two-year Drafting & Design Technology program is a rewarding challenge for students in their junior and senior year of high school who enjoy working in teams to solve complex, real-world problems in new and exciting ways. Students acquire a foundation in design and engineering disciplines through the introduction of mechanical and architectural drafting and engineering principles. Marketable skills are developed in computer-aided drafting (CAD) and computer-aided manufacturing (CAM) by training on state-of-the-art equipment and software. With a focus on mechanical design and product design processes, students will learn to take a product from concept drawing to prototype. This program provides students with many exciting opportunities for rewarding, entry-level employment and career advancement.

Skills you'll learn:

- Mechanical drafting and design
- Architectural drafting and design
- Computer-aided manufacturing (CAM)
- Computer-aided drafting (CAD)
- Electro-mechanical drafting and design
- Presentations and animations
- 3D solid modeling
- Civil drawings

Certificate you'll earn:

- OSHA 10-hour Card: General Industry
- Autodesk Inventor Certified User Certificate
- Autodesk AutoCad
- Autodesk Revit

Hands-on Project: Senior Capstone

In the final trimester, our seniors show off their knowledge, creativity, skill, and passion while completing the Senior Capstone project. Students can propose a project in any of the areas they've studied during their two years in the program: architectural, mechanical, and animation graphic design. Their projects may range from designing a drum set to a luxury home. Once their topic is approved, students will create a detailed CAD drawing of the object with full details of its size before preparing a three-dimensional model of the object to present to a board of evaluators.

WE'LL HELP YOU SHAPE
YOUR IDEAS AND MAKE
YOUR WORK MEANINGFUL

drafting design





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“Information Technology has given me a place to develop my learning ability, meet with my like-minded peers, and engage in a community setting.”

— Forrest Amtmann,
Class of 2018

information

Due to rapid advancements in digital technology, our Information Technology program is quite popular and appeals to the self-directed, detail-oriented student who enjoys logic-based problem-solving. Instructions include computer hardware and software concepts, PC service and maintenance, network design and configuration, web design, python programming, and cybersecurity. Students also build and configure advanced networking systems, servers, and workstations to highlight traditional and cloud-based networking and computer operating systems.

Skills you'll learn:

- Computer repair and troubleshooting
- Programming (python)
- Network design
- Cybersecurity concepts
- Web development and design

Certificates you'll earn:

- | | | |
|---------------------------------------|---|-----------------------|
| • OSHA 10-hour Card: General Industry | • Security Pro | • CompTIA A+ |
| • PCEP Certified Python Programmer | • Fortinet Network Security Pro Level 1 & 2 | • CompTIA Network+ |
| • PC Pro | • CyberARK Level 1 Trustee | • CompTIA Security+ |
| • Network Pro | | • AP Computer Science |

Hands-on Project: PC Build

We have all fired up a computer, set to work checking e-mails, and connected to a website to access information. Ever wondered where this information comes from and how it's stored? Our Information Technology students can tell you exactly how computers function and how to build one from scratch. As sophomores, students are divided into teams to develop a plan to build and configure a server that fits the needs of an enterprising business. Each group creates a bid that includes compatibility, cost, and functionality considerations before competing against each other for the job. The group with the winning bid gets to lead the project, allowing other classmates to follow their plan to build and configure the server.



TECHNICAL & PROFESSIONAL CAREERS

Information Technology

DIRECT ENTRY INTO WORKFORCE

- PC technician
- Technical support specialist
- Network technician
- Cybersecurity technician
- Customer service technician

Starting Salary: \$40,000

POST-SECONDARY CERTIFICATE/LICENSE

- Network administrator
- Database administrator
- IT specialist
- IT security analyst
- Front end developer

Starting Salary: \$68,000

UNIVERSITY DEGREE

- AI analyst
- Computer engineer
- Software engineer
- MIS analyst
- Network engineer
- Cybersecurity analyst

Starting Salary: \$85,000

JOB GROWTH

Employment in the information technology industry is expected to grow 13% from 2016 to 2026, faster than the average for all occupations.

technology

TECHNICAL & PROFESSIONAL CAREERS

Plumbing

DIRECT ENTRY INTO WORKFORCE

- Apprentice plumber
- Plumbing supply worker
- Boilermaker
- HVAC mechanic and installer
- Welder
- Waste water treatment facility worker

Starting Salary: \$35,000

POST-SECONDARY CERTIFICATE/LICENSE

- Small business management
- Residential and commercial plumber
- Journeyman license
- Master license
- Water transportation
- Construction manager
- Construction and building inspector

Starting Salary: \$50,000

UNIVERSITY DEGREE

- Systems engineer
- Stationary engineer
- Civil engineer
- Water treatment scientist

Starting Salary: \$70,000

JOB GROWTH

Employment in the plumbing industry is projected to grow 16% from 2016 to 2026, much faster than the average for all occupations.



The Plumbing program offers training in residential and commercial plumbing in accordance with the Commonwealth of Massachusetts Fuel Gas and Plumbing Code. Students who enjoy collaboration, being on the move, and the satisfaction of seeing the immediate results of their work will find plumbing a good fit. With a strong concentration in science and math, this challenging curriculum includes instruction in the assembly of steel, copper, and cast iron piping, residential hot and cold water distribution systems, drainage waste and vent systems, and the installation of commercial plumbing fixtures. The combination of training within our Plumbing program and real-world plumbing experience under the tutelage of Master Plumbers has resulted in excellent job placements.

Skills you'll learn:

- Residential and commercial plumbing code
- Boiler and hot water heater installation
- Sizing and installing residential gas hydronic heating systems
- Sizing and installing water and gas piping
- Drainage waste and vents (DWV)

- Blueprint reading
- Drain cleaning
- Valve repair
- Troubleshooting

Certificates you'll earn:

- OSHA 10-hour Card: Construction Industry
- Massachusetts Plumbing Tier Certification
- Qualified students receive credited hours toward apprenticeship
- Tier I & II (220-hours)
- 1 Year Practical Theory

Hands-on Project: Historical Renovations

The plumbing field, like most trades, is continually evolving and improving its environmental awareness strategies and building codes. Bringing a 200-year-old home into the 21st century was a challenge our students were happy to undertake. The students brought the old plumbing system of the historic Asa Waters Mansion in Millbury up to current standards by repiping it, replacing fixtures, updating bathrooms, and modernizing the kitchen.

“

I chose to attend BVT because I knew I wanted a hands-on learning environment, but I didn't expect how much I would learn about hard work, professionalism, and life skills. BVT has more than prepared me for my future.”

— Zachary Bergeron,
Class of 2018



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“BVT gave me the tools through National Honor Society, Student Council, and playing sports to be the leader I am today. I always knew I wanted to go into the trades, and now I work at Wayne J. Griffin Electric Inc., as a lead Journeyman Electrician. I help run projects by working hand-in-hand with the foreman and project managers. BVT made it possible for me to strive for excellence academically and vocationally.”

— Matthew Forman, Master Electrician
at Wayne J. Griffin Electric Inc.,
Class of 2008

electrical

The Electrical program is ideal for students who enjoy science in action, problem-solving, and managing a project from conception to completion. Through shop workstations and real-world worksite experience, students are trained on modern electrical devices, apparatus, and wiring used in residential, commercial, and industrial settings, as well as advanced electrical theory and electrical code updates. Students also learn to install and troubleshoot live equipment, including motors, controls, transformers, and advanced high and low voltage systems. After completion and graduation from the Electrical program, students will have over 1,500 work hours and 200 theory hours to be credited toward the state journeyman's licensing exam. Current Massachusetts licensing requirements are 8,000 work hours and 600 theory hours for state exam testing.

Skills you'll learn:

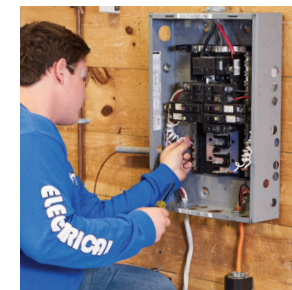
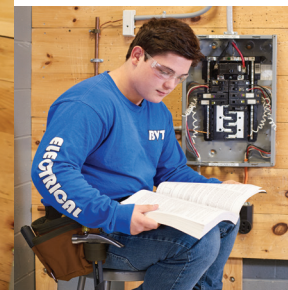
- Residential, industrial, and commercial wiring
- Draw electrical schematics
- Control and protection
- Electrical distribution
- Metering
- Motor control wiring, code research & interpretation

Certificates you'll earn:

- OSHA 10-hour Card: Construction Industry
- Credits toward the MA Journeyman's License

Hands-on Project: Commercial & Industrial Wiring

Most people only think of residential wiring when they think of the electrical trade, but there are ample opportunities in commercial and industrial wiring. Through in-class projects, students will wire metal stud rooms to reflect commercial business offices. These projects teach them to utilize the multiple styles of wiring methods needed to wire large commercial and industrial spaces effectively.



TECHNICAL & PROFESSIONAL CAREERS Electrical

DIRECT ENTRY INTO WORKFORCE

- Residential, industrial, and commercial electrician
- Maintenance electrician
- Electrical equipment sales
- Industrial controls technician
- Communications installer
- Fire alarm system installer
- Electrical manufacturing
- Electrical supply worker
- Appliance repair technician

Starting Salary: \$40,000

POST-SECONDARY CERTIFICATE/LICENSE

- Electrical technician
- Small business management
- Electrical contractor
- Fiber optics technician

Starting Salaries: \$54,000

UNIVERSITY DEGREE

- Electrical engineer
- Theater lighting technician
- Lighting designer

Starting Salaries: \$75,000

JOB GROWTH

Employment in the electrical industry is projected to grow 9% from 2016 to 2026, as fast as the average for all occupations.

TECHNICAL & PROFESSIONAL CAREERS

Construction Technology

DIRECT ENTRY INTO WORKFORCE

- Rough and finish carpenter
- Cabinet maker
- Retail sales/construction supply
- Drywall/plasterer
- Roofer
- Window/siding installer
- Union carpenter apprentice

Starting Salary: \$40,000

POST-SECONDARY CERTIFICATE/LICENSE

- Estimator
- Construction supervisor
- Architectural technologist
- Engineering technician
- Interior/exterior design
- Draftsperson
- Surveyor

Starting Salary: \$55,000

UNIVERSITY DEGREE

- Civil/structural engineer
- Design engineer
- Real estate developer

Starting Salary: \$75,000

JOB GROWTH

Employment in the construction industry is projected to grow 12% from 2016 to 2026, faster than the average for all occupations.

Construction Technology offers training for students who want to develop their natural talents and interest in building and construction. Immersed in this diverse career path, students learn to apply the skills taught within our construction technology laboratory. Instruction in commercial and residential construction and remodeling prepares our students to participate in real-world off-site construction projects and on-campus renovations. With safety in mind, hands-on experience is gained by using state-of-the-art power and specialized tools, such as shapers, CNC routers, radial arm saws, planers, jointers, and oscillating sanders. Students build confidence and develop attention to detail while becoming knowledgeable in modern methods and styles of construction.

Skills you'll learn:

- Hand tool use and maintenance
- Shop procedure and planning
- Worksite preparation and safety
- Interpreting construction prints
- Interior and exterior finish work
- CNC programming
- Residential and commercial building systems
- Fundamentals of concrete and masonry
- Heavy equipment operation (excavation simulator)
- Window and siding installation
- Project estimating
- Roofing

Certificates you'll earn:

- OSHA 10-hour Card: Construction Industry

Hands-on Project: Community Outreach

Many of our students learn best by doing. So what better way to get real-world experience than to lend a helping hand to our community. Participating in community projects is a major part of the senior curriculum. Students work within the Blackstone Valley on a variety of framing, insulation, drywall, concrete work, window installation, and finishing detail projects. These projects have included renovations of the Alternatives Unlimited Complex in Northbridge and the Millville Town Hall. These community projects allow students an opportunity to experience a live construction site and sharpen their skills while learning local and state codes and regulations associated with residential and commercial buildings.



“As a second generation carpenter, attending BVT along with my three brothers to study carpentry was an easy decision. What I didn’t know then is that I would be back years later as a teacher. I believe in the education that BVT provides and am honored to be part of that today.”

— Paul Savard, Carpentry Instructor
at Blackstone Valley Tech,
Class of 1993



Print Media

Transfer Tape

Intermediate Vinyl

“

“This shop is like a small family connecting with each other to create amazing ideas. We have learned the importance of networking and have the skills that one day may be seen in our communities through a lasting piece of creativity.”

— Courtney Leonard,
Class of 2016

painting design

Students who enjoy working with colors and textures and are interested in a career that values creativity and imagination will find Painting & Design Technology rewarding. The program provides specialized classroom instruction and applied experiences both on- and off-campus. Students are trained in the preparation and application of various painting and design techniques used to enhance and decorate interior and exterior spaces according to the client's vision, style, and taste. The integration of the arts, science, math, and the latest technology is highly evident in this program.

Skills you'll learn:

- Interior design
- Graphic design
- Architectural design
- Computer-aided sign making
- Large format digital printing
- Drawing and reading blueprints
- Color theory and paint tinting
- Industrial and exterior painting
- Decorative faux finishing
- Set design
- Spray painting
- Wallpapering

Certificates you'll earn:

- OSHA 10-hour Card: General Industry
- Chief Architect: Interior Design Apprenticeship Certification

Hands-on Project: Kitchen & Interiors Remodeling

Creating kitchen and home interiors worthy of HGTV's many restoration-focused television shows takes vision. Our students begin developing their architectural and design vision by completing the Kitchen & Interiors Remodeling project. Using the Chief Architect software, our students work to create a kitchen remodel by evaluating dimensions, customer needs, layout options, and building codes. The students then dive deeper into their creative process by selecting finishes for flooring, cabinets, countertops, and lighting. The project is an opportunity for students to showcase their style as well as their understanding of local zoning and building laws.



TECHNICAL & PROFESSIONAL CAREERS

Painting & Design Technology

DIRECT ENTRY INTO WORKFORCE

- Interior design apprentice
- Retail sales in paint industry
- Retail and commercial signs
- Painter's apprentice

Starting Salary: \$30,000

POST-SECONDARY CERTIFICATE/LICENSE

- Interior designer
- Interior decorator
- Sign maker
- Graphic design
- Digital print operator
- Professional estimator

Starting Salary: \$50,000

UNIVERSITY DEGREE

- Residential and commercial interior design
- Owner/operator sign company
- Owner/operator painting company
- Brand designer
- Business management

Starting Salary: \$65,000

JOB GROWTH

Employment in the painting and design industry is projected to grow 6% from 2014 to 2024, as fast as the average for all occupations.

TECHNICAL & PROFESSIONAL CAREERS

Heating, Ventilation, Air Conditioning & Refrigeration

DIRECT ENTRY INTO WORKFORCE

- Commercial HVAC&R apprentice
- Residential HVAC&R apprentice
- Ductwork installer
- HVAC&R control technician
- Apprentice HVAC&R technician
- Assistant maintenance technician
- Apprentice pipefitter

Starting Salary: \$35,000

POST-SECONDARY CERTIFICATE/LICENSE

- HVAC&R technician
- System designer
- Project cost estimator
- Apprentice HVAC&R engineer
- Assistant facilities manager
- Assistant project manager

Starting Salary: \$47,000

UNIVERSITY DEGREE

- HVAC&R engineer
- Design engineer
- Facilities manager
- Project manager
- Senior system designer

Starting Salary: \$75,000

JOB GROWTH

Employment in the HVAC&R industry is projected to grow 15% from 2016 to 2026, much faster than the average for all occupations.

By providing essential services, the heating, ventilation, air conditioning, and refrigeration (HVAC&R) industry offers the well-trained student a great variety of occupations, job security, and opportunities for advancement. Through related theory lessons, laboratory projects, and live-work on HVAC&R jobs in the Blackstone Valley, students learn to install and maintain special environments like residential homes, schools, hospitals, offices, restaurants, and factories. Substantial instruction in electrical theory, the physics of heat and fluids, formulas for heat load calculations, as well as basic design and engineering of heating and cooling systems make HVAC&R a perfect fit for students interested in the fields of applied science and math.

Skills you'll learn:

- Basic refrigeration and piping
- Electrical controls and systems
- Basic electricity and wiring
- Commercial refrigeration
- Air conditioning and heat pumps
- Fossil fuel and alternative heat
- Installation of HVAC&R systems
- Heating and cooling system design

Certificates you'll earn:

- OSHA 10-hour Card: Construction Industry
- Certified trade hours for state HVAC technician and pipefitting licenses
- EPA (Core, Core 1, Core 2, and Universal Certification)

Hands-on Project: HVAC System Design

Our seniors, tasked with installing a gas or oil boiler, have a chance to put their theoretical skills to the test. The HVAC System Design project allows students to flex all of their HVAC muscles as they work with fossil fuels, hot water piping, ventilation, and electrical wiring. Once their boiler is installed, students complete a system startup and performance test to verify a quality installation. The capstone-style project allows our students to utilize a variety of their skills and strengthen their grasp on several aspects of the HVAC&R field.



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“HVAC&R has helped shape me into the person I am today. The skills we learn in this program help to craft our future and encourage us to become the best version of ourselves.”

— Eric Lecuyer, Class of 2018

heating

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11
12

ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	ELECTIVES	
Honors English I College Prep English I English I	Honors Algebra II Honors Algebra I College Prep Algebra I Algebra I	Honors Biology (Lab – 1 year course) College Prep Biology Part I (Lab) Biology Part I (Lab) Honors Physics (Lab – 1 year course) College Prep Intro to Physics I (Lab)	Honors World History II: 1500 – 1800 College Prep World History II: 1500 – 1800 World History II: 1500 – 1800	Music 9 Introduction to Art Writer’s Voice Biomedical Sciences Literary Lab	Spanish I Spanish II Honors Immersion Spanish II
Honors English II College Prep English II English II	Honors Geometry College Prep Geometry Geometry	College Prep Biology Part II (Lab) Biology Part II (Lab) Honors Chemistry (Lab) College Prep Chemistry (Lab) College Prep Intro to Physics II (Lab)	Honors U.S. History I College Prep U.S. History I U.S. History I	Music 10 Illustration & Design Pottery Fiber Arts & Jewelry Vision & Revision Accelerated Algebra II Human Body Systems	Spanish I Spanish II Spanish III Honors Immersion Spanish III Literary Strategies
AP English Language & Composition Honors English III College Prep English III English III	Honors Pre-Calculus/Intro to Trigonometry Honors Algebra II College Prep Pre-Calculus/ Intro to Trigonometry College Prep Algebra II Algebra II Part I	AP Biology (Lab) Honors Biology (Lab) College Prep Biology (Lab) AP Chemistry (Lab) Honors Chemistry (Lab) College Prep Chemistry (Lab) AP Physics I (Lab) Honors Physics (Lab) College Prep Physics (Lab) Physics (Lab)	Honors U.S. History II College Prep U.S. History II U.S. History II	Intro to American Popular Music AP Music Painting & Drawing Sculpture Dital Illustration Printmaking AP Psychology Medical Interventions Current Events	Spanish I Spanish II Spanish III Spanish IV Honors Immersion Spanish IV College Bound Writing Literary Workshop
AP English Literature & Composition Honors English IV College Prep English IV English IV	AP Calculus AB Honors Pre-Calculus Honors Statistics College Prep Functions & Trigonometry Algebra II Part II	AP Biology (Lab) Honors Biology (Lab) College Prep Biology (Lab) AP Chemistry (Lab) Honors Chemistry (Lab) College Prep Chemistry (Lab) Chemistry (Lab) Honors Environmental Science AP Physics I (Lab) Honors Physics (Lab) College Prep Physics (Lab)	AP U.S. History Honors American Government College Prep American Government American Government	Music Expression AP Music Photography Interdisciplinary Art Honors Art School Prep AP Psychology Culture & Civilizations Literary Roundtable	Spanish II Spanish III Spanish IV Spanish V AP Spanish Language Workplace Writing

Advanced Placement Courses

We offer Advanced Placement (AP) courses in each of the four core disciplines: Science, Mathematics, English, and Social Studies. As newly accepted 8th graders, our students and their parents are guided to create a roadmap to graduation and beyond. Within that on-going process, they are empowered to make decisions about career preparation, course selections, and appropriate levels of rigor, while encouraged to reach for the most challenging levels of coursework possible.

Enrollment is open to all students; however, students must meet the pre-requisite coursework for some AP subjects. Prerequisites for each AP course can be found in our Program of Studies: www.valleytech.k12.ma.us/programofstudies

Articulation Agreements

BVT has multiple articulation agreements designed to provide college credit to those who attend matching programs at the post-secondary level. Our vocational and academic programs are aligned with over 20 colleges and post-secondary institutions that recognize the rigor of our curriculum and the skills our graduates acquire. For a full list of articulation agreements visit: www.valleytech.k12.ma.us/articulationagreements

ACADEMIC COURSES Career, College & Life Ready

Off to work they go, building credentials, pursuing industry licenses, certifications, and degrees.

- Assumption College
- B Luxe Hair & Make-up Studio
- Baystate Outdoor Personia
- Blackstone Valley Machine
- Bridgewater State University
- Bryant University
- Costal Carolina University
- Dean College
- Emerson College
- Georgia Institute of Technology
- Imperial Ford & Chevrolet
- JJ Mechanical
- Johnson & Wales University
- Lincoln Tool & Machine Corporation
- Maine College of Art
- Massachusetts College of Art & Design
- Massachusetts Maritime Academy
- Millibar, Inc.
- MPC Services
- New England Institute of Technology
- Precision Heating & Cooling
- Renaud Electric
- Rochester Institute of Technology
- Wagner Mercedes-Benz
- Wentworth Institute of Technology
- Worcester Polytechnic Institute
- Worldband

We continuously strive to meet our students' evolving academic and vocational needs. Visit www.valleytech.k12.ma.us/programofstudies for the most current Program of Studies:

STUDENT SUPPORT SERVICES

Student Focused Care

School Based Health Center

Whether illness strikes during the school day or a chronic issue requires long-term assistance, BVT and the Milford Regional Medical Center are here to provide your teen with the care they deserve.

For nearly 20 years, the Milford Regional Medical Health Center's School Based Health Center, which is located in our health suite, has collaborated with our school nurses and counselors to treat and prevent health and social problems that can interfere with your teen's academic success. While health insurance companies are billed for student's care, there is no fee applied to BVT families, and no student will ever be denied services for financial reasons.



High school is a time when your teen begins to assert their independence. As they navigate this new landscape and test boundaries, they often experience both successes and setbacks. During this transition, they'll need to talk through academic concerns, process issues, and plan future goals. Having someone who will listen with compassion and support will help them develop a deeper understanding of who they are and what they hope to make of their futures.

School Counseling

Our school counselors are here to listen. They care about the whole learner and are committed to maximizing your teen's learning while supporting their personal and career goals. They've developed a wide range of services for your teen designed to celebrate their successes and foster self-compassion, resilience, and growth:

- Academic & Vocational Advising
- Course Planning
- Career & College Planning
- Financial Support
- Mental Health & Wellness

Regularly scheduled counselor meetings also provide your teen with the support they needed to figure out who they are, where they are going, and what they need to do to get there.

Career, College & Life Ready

In addition to individual counseling and crisis intervention, students receive instruction designed to cultivate personal, social, and employability skills necessary for success. By using an integrated approach, your teen's academic, technical, and employability skills are combined with reflective experiences to promote self-understanding, appreciation of diversity, career research, and decision-making skills. In the process, they learn to craft a well-developed career plan and individualized post-secondary strategy that will market their skills in highly competitive settings and articulate their employable skills by collaborating with counselors and other stakeholders who support the student in the career planning process.

Through individual meetings, planned lessons, and presentations our school counselors facilitate the career planning process. With input from faculty, students develop and revise their career plan that reflects their vision of the future. Annually, parents/guardians have the opportunity to evaluate their teen's technical and academic experiences. In this way, your teen can select a challenging and relevant high school experience that serves to articulate the steps necessary for them to attain positive results.

Special Education

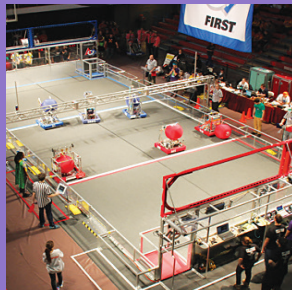
Our Special Education department recognizes and supports the importance of individualizing the educational experience to meet the unique needs of your teen. A continuum of placements and services are available to meet the needs of those students with special needs including:

- Learning Lab: academic support in a quiet setting with access to resources, technology, and small group assistance to enhance student learning.
- General Educator Classes: taught by a General Educator without inclusion support, may have special education consultation.
- Inclusion Support Classes: taught by a General Educator with the inclusion of Special Education staff (Teacher Assistant, Special Education Instructor, Speech and Language Pathologist, STEM Instructor, or Reading Aides)
- Team Taught Classes: co-taught classes with a Special Educator and a General Educator
- Resource Room: a small group setting, for students on Individual Education Plans requiring specialized instruction

English Language Learner Services (ELL)

Through ELL services, identified students are provided instruction designed to increase their ability to acquire English language skills and to access subject matter content. Our approach enables students with ELL challenges to maximize their success in the classroom, in the overall school environment, and in the community at large.

**BVT IS RICH WITH
RESOURCES TO SUPPORT
AND ENCOURAGE YOUR
PERSONAL DEVELOPMENT**



YOU'LL BE GIVEN THE
SPACE AND RESOURCES
TO BE CREATIVE AND
EXPRESS YOURSELF

If you like to hit the wintry slopes of New England, you're passionate about art, want to write a play, or run for class office, BVT offers students numerous extracurricular activities. Drama, Artworks Magazine, a Cappella Chorus, and the Fashion Club give students the opportunity to follow their passions and flex their creative muscles. By joining groups like the National and Technical Honor Societies, LEO Club, Friends of Rachel Club, and Student Council, students experience the immeasurable satisfaction of lending their neighbors a helping hand. Take a look at our list of [activities and clubs](#) below and see for yourself the many ways our students get inspired, connect with like-minded people, and showcase their talents.

CLUBS & ACTIVITIES

Art Club
Aviation Club
Bass Fishing
Bird Watching Club
Chorus
Class Officers
DECA
Drama
Fashion Club
FIRST Robotics
Foreign Trips
Friends of Rachel
Gaming Club
Good News Club
GSA
Helping Hands
Homecoming
Humanities Scholars
Jazz Band
LEO Club
Math Team



Model United Nations
Motor Sports Club
Movie Club
Multicultural Club
National Honor Society
National Technical
Honor Society

SEA Club
Ski & Snowboard Club
SkillsUSA
Spiritual Club
Student Council
Unicef Club
Yearbook



Whether you like to swing a bat, work up a sweat on the basketball court, or cheer our athletes on to victory, BVT is full of opportunities for our students to learn the life-changing practice of taking pride in everything they do. Our nearly 20 athletic teams have grown over the years to be regular contenders for state and national championships and titles. Group sports like field hockey, football, lacrosse, and volleyball give students a chance to be part of a team and support each other. By joining sports like golf, cross-country, and track and field, students develop a strong sense of focus, commitment, and determination. Take a look at our list of [athletic](#) opportunities below and see for yourself the many ways our students are having fun and continuing to learn well past the school day's final bell.

FALL

Cheerleading
Cross-Country
Field Hockey
Football
Soccer
Girls Volleyball
Golf

WINTER

Alpine Skiing
Basketball
Cheerleading
Ice Hockey
Wrestling

SPRING

Baseball
Boys Volleyball
Lacrosse
Softball
Track & Field



“

“The student life at BVT is so welcoming and friendly. You really find a second family by being involved with a team or activity. It is a home away from home.”

— Rebecca Rose, Millbury,
Class of 2016

activities athletics

apply



BVT serves the towns of:

- Bellingham
- Blackstone
- Douglas
- Grafton
- Hopedale
- Mendon
- Milford
- Millbury
- Millville
- Northbridge
- Sutton
- Upton
- Uxbridge

Admissions

Students who are residents of the 13 towns in the Blackstone Valley Vocational Regional School District, who will have completed Grade 8 prior to enrolling, may apply. An application may be obtained from your school guidance counselor or by calling our Student Life Office at **508-529-7758 x3020**.

The application deadline is the **First Friday in February**. Students in Grade 8 who are interested in applying should keep the following timeline in mind:

- **November:** Tours of BVT during the school day arranged by each sending school's guidance department.
- **Late November/Early December:** Parent/Applicant Night is open to Grade 7 and 8 students and their families for tours and informational activities throughout campus.
- **February:** Application Deadline.
- **March:** Notification and acceptance letters mailed.
- **April:** Placement testing conducted.

For more information on our admissions process visit: www.valleytech.k12.ma.us/applytobvt

ACCREDITATION & ASSOCIATIONS

Blackstone Valley Regional Vocational Technical High School is fully accredited by the New England Association of Schools and Colleges. It is regulated by the Massachusetts Board of Education and is a part of the Massachusetts network of regional vocational technical high schools.

EQUAL OPPORTUNITY

Blackstone Valley Regional Vocational Technical High School welcomes and is open to all students and offers equal opportunities in all approved programs and courses of study without regard to race, color, sex, sexual orientation, gender identity, religion, national origin, homelessness, or disability.

TRANSLATION SERVICES

If you would like a translation of this view book, please contact the office of the Principal at **508-529-7758 x3041**.

PEDIDOS DE TRADUÇÃO

Si usted desea una traducción de este folleto favor de comunicarse con la oficina del Principal al **508-529-7758 x3041**. Se você gostaria de ter uma tradução deste manual, entre em contato com o escritório do director no telefone **508-529-7758 x3041**.

With an educated workforce steeped in a history of innovation, invention, and business success, the historic Blackstone Valley region offers the community an exceptional quality of life. Its position, at the intersection of rail, road, and air networks, makes it ideal for local, regional, and international business efforts. Twelve major colleges are situated within 30 minutes of the Blackstone Valley, including leaders in business, technology, medicine, and liberal arts. Located in the heart of the region, BVT is easily accessible within an hour's drive of Boston, Providence, Worcester, and Hartford.

In partnership with local colleges, businesses, and economic development agencies, BVT works toward enhancing the economic, social, and historic strengths of the region. The school acts as a focal point for the region by sponsoring local, regional, and state level conferences on the economy, technology, and education; establishing regional technology and school-to-career initiatives; completing hundreds of hours in community service projects, which draw on students' and instructors' vocational technical skills; and actively participating with government agencies, chambers of commerce, educational collaboratives, and the media.

Interested in visiting our campus (www.valleytech.k12.ma.us/visitourcampus)? Come on by, we'd be happy to show you around.

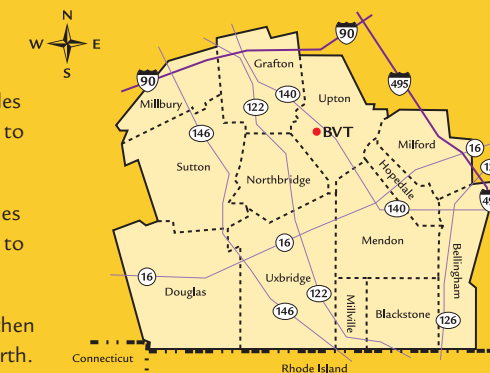
Directions to BVT

From the North: Take Route 495 South to exit 21B, bear right toward Upton. Follow approximately 5 miles to the set of lights at the intersection of Route 140. Cross over Route 140 to Maple Avenue and continue to the end. At lights turn left onto Pleasant Street to BVT on the left.

From the South: Take Route 495 North to exit 21B, bear right toward Upton. Follow approximately 5 miles to the set of lights at the intersection of Route 140. Cross over Route 140 to Maple Avenue and continue to the end. At lights turn left onto Pleasant Street to BVT on the left.

From Rhode Island: Take Route 146 North to exit 2, Chocolog Road, Uxbridge. Bear right on ramp and then turn left onto Route 146A North. Follow to intersection with Route 122 and turn left onto Route 122 North. Travel through Uxbridge to Whitinsville and turn right at the lights onto Church Street Extension. Follow to end and turn left onto Quaker Street. Continue through one set of lights to BVT on the left.

visit





Blackstone Valley Vocational Regional School District

65 Pleasant Street, Upton, MA 01568

508-529-7758

www.valleytech.k12.ma.us



Our view book was produced by the students of BVT's Multimedia Communications Program.

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