

RIVER VALLEY TECHNICAL CENTER



Program of Studies





“Educating Today’s Students For Tomorrow’s Careers”

December 2010

Dear Prospective Students and Parents:

The River Valley Technical Center is proud to serve the region encompassing Bellows Falls Union High School, Black River UHS, Green Mountain UHS, Fall Mountain Regional High School, and Springfield High School.

As you are probably aware, the importance of technical education has grown in response to the tremendous need for a highly skilled workforce. No longer can an individual begin a career with limited skills and expect to be successful. Today, employees must be able to utilize technology, solve problems, and work effectively in teams. The River Valley Technical Center (RVTC) affords high-school students and adults the chance to learn these skills through practical, hands-on experience so that they are better prepared to take advantage of further learning and career opportunities.

This booklet provides a brief description of our current programs. Many of our programs offer post-secondary credit, industry-recognized credentials, and leadership opportunities. Whether you are considering a career immediately after graduation, planning to enter college, or looking to improve your employability skills, RVTC has a great deal to offer. Please review our catalog of studies carefully and contact us if you have any questions.

We also invite you to visit the River Valley Technical Center. We welcome the opportunity to discuss your interests or to provide a tour of our state-of-the-art facility. Please join us and discover what technical education can do for you!

Very truly yours,

*The Faculty & Staff of
River Valley Technical Center*

TABLE OF CONTENTS

Administration and Faculty List	pg	4
Program Summary	pg	5
Program Information		
• <i>Guidance Services</i>	pg	6
• <i>Costs</i>	pg	6
• <i>Prerequisites</i>	pg	6
• <i>Pre Tech</i>	pg	7
• <i>School and Work Based Learning Opportunities</i>	pg	7
 Career Clusters		
• Agriculture, Food & Natural Resources Career Cluster <i>Horticulture and Natural Resources Program</i>	pg	7
• Architecture and Construction Career Cluster <i>Carpentry Program</i>	pg	8
<i>Industrial Trades Program</i>	pg	8, 9
• Arts, A/V Technology & Communications Career Cluster <i>Media Arts & Technology: Audio, Video, Motion 4.0 Program</i>	pg	9, 10
• Business, Management & Administration Career Cluster <i>Business & Financial Services Program</i>	pg	11
• Health Science Career Cluster <i>Health Careers Program</i>	pg	12
• Hospitality and Tourism Career Cluster <i>Culinary Arts Program</i>	pg	13
<i>Hospitality & Recreation Management Program</i>	pg	13, 14
• Human Services Career Cluster <i>Human Services Program</i>	pg	14, 15
• Information Technology Career Cluster <i>Technology Essentials Program</i>	pg	15
<i>Hands-On Computer Systems/Website II Program</i>	pg	16
• Law, Public Safety & Security Career Cluster <i>Law Enforcement Program</i>	pg	16
• Manufacturing Career Cluster <i>Manufacturing Technology Program</i>	pg	17
• Science, Technology, Engineering & Mathematics Career Cluster <i>Engineering Technology Program</i>	pg	18
 Adult & Continuing Education	pg	19
Statement of Non-Discrimination	pg	19

River Valley Technical Center

at the Howard Dean Education Center
307 South Street.
Springfield, VT 05156
802-885-8300

ADMINISTRATION AND FACULTY LIST

Linda Aitken

Health Careers
A.S. Cape Cod Community College
M.Ed. Cambridge College

Gretchen Austin-Ward

Secretary to the Assistant Director
A.A. Vermont College

Brenda Blodgett, CEOE

Administrative Assistant
A.S. University of Vermont

Kelly Broker-Campbell

Cooperative Education,
Middle School Outreach, and
Programs of Study Coordinator
B.S. University of Wisconsin-
Green Bay

Morgan Brown

Pre-Technical Studies
B.A. Castleton State College

Kimberly Buehler

Hospitality & Recreation Management
A.S. Massasoit College

Becky Bushey

Mathematics Education
B.A. Cedarville University

Bettyann Casella

Instructional Assist – Dist Ed
B.S. Johnson State College
MAT Marlboro College

Coralee Choiniere

Registrar

Melissa Connor

Business & Financial Services
B.S. Castleton State College
Certified R.E.A.L. Instructor

David Culver

Cooperative & Adult Education
Coordinator
B.S. State University College at Oswego
M.Ed. Keene State College

Shannon Devereux

Media Arts & Technology: Audio
B. A. Curry College
M. Ed. Castleton State College

Scott D. Farr

Assistant Director
B. S. Lyndon State College
M. S. Minot State University
C.A.G.S. St. Michael's College

Gail Fletcher

Technology Essentials
Hands On Computer Systems
B.A. Keene State College
M.A. Marlboro College
Certified R.E.A.L. Instructor

Richard Fuller

Industrial Trades
(Electrical, Plumbing and Welding)
A.A.S. University of New Hampshire
B.S. Granite State College
NCCER Instructor Certification

Christopher Gray

Engineering / Manufacturing
A.S. Keene State College
B.S. Keene State College
M.A. Norwich University

David Groenewold

Culinary Arts
Culinary Institute of America
Industry Council of Greater Cincinnati
Certifications: Garde Manger, Culinary
Theory, and Classical Pastry

John Harmer

Agricultural Education
Stockbridge School of Agriculture
A.S. University of Massachusetts
B.S. University of Massachusetts

Kenneth M. Hart, Jr.

Systems Administrator
A.S.C.S. Hesser College at Manchester
Certification, Comptia A+
Certification, Comptia Network+

Erin M. Hunter

Carpentry
B.S. Vermont College of Union Institute
M. Ed. Antioch New England
NCCER Instructor Certification

Stephen Karaffa

Law Enforcement
Kingston Police Academy MPTC Cert
Vermont Police Academy VCJTC Cert
Rockland County Police Academy
MPTC Cert Police Supervisor

Courtney Lihatsch

Human Services
B.S. Skidmore College
Certified R.E.A.L. Instructor

Shamus Martin

Distance Ed Instructor
Digital Audio & Electronics
A. A. University of Phoenix

Roger McNamara

Guidance Coordinator
B.S. Northeastern University
M. Ed. Antioch New England

Zachary McNaughton

Digital Audio & Video Electronics
A.S. Full Sail Real World Education

Judith Pullinen

Director
B.S. Castleton State College
M.A. Castleton State College

Jeff Renard, CFOT, MECP

Distance Learning Coordinator
Digital Audio & Video Electronics
A.A.S. Community College of the Air
Force
M.S.I.T. Marlboro Graduate Center
C.A.G.S., Marlboro Graduate Center
B.A. Burlington College

Carol Sylvia

Adult Services Secretary

Casey Spindler

Special Needs Instructor
B.S. Johnson State College

Donna Vargas

Culinary Arts
UVM Professional Program Culinary
Arts

Jan Wright

Guidance Counselor & Spec Needs
B.S. Springfield College
M. Ed. Springfield College

PROGRAM	COLLEGE CREDIT	EMBEDDED CREDIT <i>Student must master 90% of the program competencies to earn the embedded credit.</i>	CREDENTIAL
Business & Financial Services	CCV	English , Math (2 Yr Prog)	Brainbench, NEFE
Carpentry	NEIT	1 Math (2 Yr Prog)	NCCER
Culinary Arts		1 Math (2 Yr Prog)	ServSafe, Pro Start
Electronics: Audio & Video Production	NEIA, NESCom	1 Science (2 Yr Prog)	CFOT, CET, MECP
Engineering Technology	RIT, VTC	1 Math (2 Yr Prog)	NIMS
Hands On Computer Systems	RVCC	1 Math (1 Yr Tech Ess & 1 Yr Hands On)	CompTIA A+
Health Careers	RVCC	1 Science (2 Yr Prog)	LNA,CPR, AED, First Aid
Horticulture & Natural Resources		1 Science (2 Yr Prog)	GOL, EPA Worker, PEST App
Hospitality & Recreation Management	JSC, Clemens Coll	1 Math (2 Yr Prog)	Springer/Miller, AHLA
Human Services		1 Social Studies (2 Yr Prog)	American Red Cross, CPR
Industrial Trades		1 Math (2 Yr Prog)	AWS, NCCER
Law Enforcement	CCV, RVCC,FCC	1 Social Studies (2 Yr Prog)	FEMA, Amer Red Cross, VBB
Manufacturing Technology	RVCC, Keene State, RIT, VTC	1 Math (2 Yr Prog)	NIMS
Pre Technical Studies		1 Math, 1 English, (1 Yr Prog)	
Technology Essentials	RVCC	1 Math (1 Yr Tech Ess & 1 Yr Hands On)	Adobe Certified Associate, CompTIA Net+

Articulation Key: CCV = Community College of Vermont, FCC = Frederick Community College, JSC = Johnson State College, LSC = Lyndon State College, NEIA = New England Institute of Art, NESCom = New England School of Communications, RVCC = River Valley Community College, RIT = Rochester Institute of Technology, VTC = Vermont Technical College,

* For detailed information regarding articulated college credit, please contact the RVTC Guidance Office at 802-885-8305.

College Credit Articulation Agreements

The River Valley Technical Center has established several articulation agreements with colleges. The agreements provide students, teachers, guidance counselors, and parents a clear path from the 11th grade in high school to completing an associate's degree in college. These agreements also assure that: students graduating from high school have both the academic and technical skills to succeed at the college level; students will have some type of advance standing with the correct college program; students will receive college academic and financial counseling.

Embedded Academic Credit

Completing a technical program may satisfy academic graduation requirements. A student interested in receiving academic credit must *successfully** complete the program. Students who *successfully** complete the technical program will be eligible for academic credit as outlined on the table on page 6.

* Successful Completion as defined by the Career & Technical Education State Board Regulations: *A student who has been judged competent in 90% of the core competencies has completed the program successfully.*

Credentials

The River Valley Technical Center has established several partnerships with business and industry that have resulted in programs being certified to teach to national and industry standards. A student who successfully

completes the program to these standards is eligible to earn an industry credential. These credentials result in a potential employer or college providing preferential treatment to the candidate in their industry or school often times guaranteeing admission to the college, an interview with a company, and in many cases a higher entry level salary. See your guidance counselor for more detail.

Technical Education provides each student the opportunity to:

- Explore an area of career interest
- Develop skills for entry level employment
- Industry Certification
- Prepare for further training and education
- Dual College Credit

In all technical programs, a major emphasis is made to bring out proper attitudes and state of the art skills for successful entrance to the world of work or post-secondary education. All students will be required to complete an application for technical education programs and will be notified of acceptance. Because of limited capacity in some areas, a selection procedure may take place, which might include reference letters, interviews and/or related information. All technical programs will require related instruction and homework, as well as a final project, exam or demonstration of proficiency in a specific skill area.

Costs

There is no tuition cost associated with enrolling in a daytime program if you are a high school student or non-diploma Vermont adult. In some programs, there are costs associated with transcribing college credit or credentialing costs. See the RVTC Guidance or Administration for current fees and costs.

Guidance Services

A comprehensive guidance program is made available to all students at the Technical Center. Career guidance, interest inventories, personal counseling, Accuplacer testing and post graduation planning are examples of services provided by the Technical Center Guidance Counselors. Every student at the Center is provided this array of services from their initial enrollment to after graduation.

Prerequisites

Applications are considered based upon date received, prerequisites met, and a desire to be successful. Students must achieve a grade of "70" or better to advance to the next level in each program. Technical Education is designed for junior and senior students, however, where noted, sophomores are accepted based on guidance counselor and program instructor approval. Flexible schedules may be obtained (1-6 credits) for certain technical programs with prior arrangement of the Program Instructor and Director.

Pre Technical Studies Program

777 Pre Tech

1 English, 1 Math, 1-2 elective credits

Open to: Grades 9 & 10
Prerequisite: Counselor Recommendation
Scheduled: Full Year, 2 hours per day

The Pre Technical Studies program is an exploratory program for freshmen and sophomores. Over the course of the school year students are expected to explore and participate in all technical programs at the Center. Students explore each program in a ten-day cycle: 2 days in the technical program accompanied by the Pre Tech Para educator and 8 days in the classroom completing various English and Mathematics work and projects related to each particular program. Program explorations will allow the students to make informed decisions regarding future career choices. Students successfully completing the Pre Tech program will be eligible for one credit of Applied Math, one credit of Applied Communications, and one or more technical credits.

Cooperative Work Placement

A maximum of 3 elective credits per school year.

Open to: Grades 10 - 12
Prerequisite: Enrollment in an RVTC Program
Instructor Recommendation
Reliable Transportation
Scheduled: Varies

Students enrolled in RVTC programs have the opportunity to take their education beyond the classroom through the Co-op program. Once the classroom teacher feels you're ready, you can be placed at a worksite related to your technical program. The work

experience can be after school or during school as a substitute for your technical program. Work-based learning experiences may be paid or unpaid, depending on the placement. Students earn one additional elective credit for every 180 hours of time on the job (*maximum of three credits per year*). Students are required to document work hours; work hours are transferable toward completion of Vermont Registered Apprenticeship Programs. Students must remain enrolled in an RVTC program and may not schedule other classes during RVTC program time to be in the Cooperative Education program

Horticulture and Natural Resources

Overview

- Urban Forestry
- Landscape/Nursery Management
- Greenhouse Management
- Woodlot Management Practices
- FFA Leadership

Career Opportunities

- Urban Tree Management
- Landscape Construction
- Nursery Management
- Greenhouse Production

College Credit Opportunity

- Not at this time

Credential

- Chain Saw Safety and Operation
- Game of Logging
- EPA Worker Protection Standard
- Handler Training
- Pesticide Applicator Core Exam

Contact the RVTC Guidance Office at 802-885-8305 for more details.

796 Horticulture and Natural Resources I

3-4 elective credits

Open to: Grades 11 and 12 (10 with permission)
Prerequisite: None
Scheduled: Full year, 2 hours per day

Students spend the entire school year learning the skills needed to gain entry level positions in numerous horticulture and natural resource businesses, ranging from nursery and greenhouse production to urban forestry to landscaping operations. Students are first introduced to skills on the thirty-acre land lab at the Center. Students are taught technical skills and are introduced to the employability skills most desired by business and industry. Students are involved in the FFA chapter and are encouraged to develop a Supervised Agricultural Experience project that applies or enhances classroom learning.

797 Horticulture and Natural Resources II

1 embedded Science*, 2-3 elective credits

Open to: Grades 11 and 12
Prerequisite: Grade of 70 or better in Hort. and Natural Resources I or written instructor permission
Scheduled: Full year, 2 hours per day

Students spend the entire year applying the skills learned in Level I to real world situations. Working closely with local and regional business and industry, students are involved in several community projects ranging from landscape plantings to tree care operations to conservation practices. Students are assessed on the quality and quantity of the projects they complete, employability skills, involvement in the FFA, and Supervised Agricultural Experience Program.

Carpentry

Overview

- Building design and assembly

Career Opportunities

- Design-Build Construction
- Construction Management
- Carpenter

College Credit Opportunity

- Not at this time

Credential

- National Center for Construction Education and Research

Contact the RVTC guidance office at 802-885-8305 for more details

754 Carpentry I

3-4 elective credits

Open to: Grades 11 & 12
Prerequisite: Algebra I or concurrent enrollment or written instructor permission

Scheduled: Full year, 2 hours per day

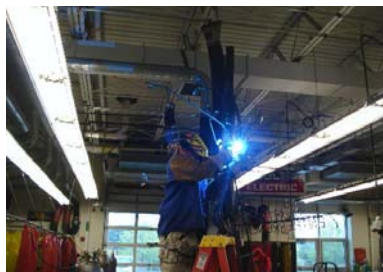
This program provides students the opportunity to gain skills and explore potential careers in Carpentry. Carpentry and other construction skills will be developed through the building of sheds and the start of the second year house project. Students will be involved in the theory and practice of construction as a profession. Construction projects will be the focus of applied learning through hands on experiential learning. Each student will develop leadership skills through the local Skills USA Chapter and will be encouraged to participate in local, State, regional and national activities.

755 Carpentry II

1 embedded Math, 3-4 elective credits*

Open to: Grade 12
Prerequisite: Grade of 70 or better in Carpentry I or written instructor permission
Scheduled: Full year, 2 hours per day

This program provides students the opportunity to gain advanced skills and careers in Carpentry. Carpentry and other construction skills will be refined through the building of a house. The student will be allowed to focus in an area of choice. Construction projects, cooperative work placements and apprenticeships will be the focus of applied learning through a hands on approach. Each student will develop leadership skills through the local Skills USA Chapter and will participate in State and national activities.



Industrial Trades

Overview

- Electrical
- Plumbing
- Mechanical
- Welding

Career Opportunities

- Maintenance Technician
- Engineering (Electrical, Mechanical, Civil)
- Electrician
- Plumber
- Fabrication
- Welder
- General Property Manager
- Construction Supervisor

Credential

- National Center for Construction Education and Research
- Qualified students may be eligible to enroll in the VTC Plumbing or Electrical State Apprenticeship Program.
- AWS Welding

Contact the RVTC guidance office at 802-885-8305 for more details.

** The student must score a 3 or 4 on 90% of the program competencies in order to become a "successful" program completer and earn the embedded credit.*

747 Industrial Trades I

3-4 elective credits

Open to: Grades 11 and 12 or instructor permission
Prerequisite: Successful completion of Algebra I or instructor permission after an interview with the student
Scheduled: Full Year, 2 hours per day

This program prepares students for a variety of trade areas. Students will have the opportunity to acquire industry-based skills in: Electrical, Plumbing, and Welding. Modules of instruction include Electrical Safety, Electrical Theory 1 and 2, Intro to the Plumbing Trades, Plumbing Tools, Oxy-Fuel Cutting, and basic Welding techniques. Computer-based, industry-derived units and/or online components enhance learning with the use of technology. These units are

supported in the lab with on-site projects, student-derived projects, and industry supported projects. Instruction also includes a set of industry-based core skills common to all trade areas (Basic Safety, Construction Math, Hand and Power Tools, Reading Blueprints, Communication Skills, and Employability Skills). The curriculum used follows the National Center for Construction Education and Research (NCCER National Industry Standard) and AWS (American Welding Society) guidelines for industry.

748 Industrial Trades II

1 embedded Math, 2-3 elective credits*

Open to: Grades 11 and 12
 Prerequisite: Grade of 70 or better in Industrial Trades I
 Scheduled: Full Year, 2 Periods

Progress in the program will increase students' knowledge within the class in Welding or Electrical or Plumbing depending on the students' interest. Using previous knowledge from the Level I course, along with the desire to attain industry certification, he/she can gain practical troubleshooting knowledge dealing with today's complex systems found in most construction / commercial applications, or, be well prepared to enter further educational training after high school. Students wishing to pursue a career in the Electrical or Plumbing trades may be eligible to enroll in the evening related apprenticeship classes and, if their schedule permits, (and instructor recommendation), may be able to work in that related trade area through the Cooperative Education Program. Computer-based, industry-derived units and/or online components enhance

learning with the use of technology. Using a hands-on, independent approach to a variety of performance-based projects, students will be prepared for cooperative work placements, apprenticeships, and leadership skills including participation in local, state, and national Skills-USA activities. Graduates may continue further educational opportunities to obtain industry certification (such as plumbing and electrical licenses or American Welding Society certification) within the Industrial Trades field, including two/four-year college programs or apprenticeship training, or they may seek entry-level positions within the trade areas.

Media Arts & Technology Audio, Video, Motion 4.0

(Web Development, Flash, Game Development offered in partnership with Tech Essentials)

Career Opportunities

- Radio / TV Broadcast Technician
- Sound Technician
- Telecommunications Engineer
- Videographer
- Editor
- Recording Engineer

College Credit Opportunity

- New England School of Communications
- New England Institute of Art
- Community College of Vermont

Credential

- Associate-Level Certified Electronic Technician Exam (CET)
- Mobile Electronics Certified Professional (MECP)

- Certified Fiber Optic Tech (CFOT)
- Final Cut Pro
- Pro Tools

Contact the RVTC Guidance Office at 802-885-8305 for more details.

Distance Education: This program may be taken online from home high school.



DE0102-01 MAT Audio Production Pathway

3-4 elective credits

Open to: Grades 11 & 12, no musical background required
 Prerequisite: Computer skills, Algebra I, instructor interview; students should also have a home computer with internet access
 Scheduled: Full year, 1st block at RVTC
 Home Page: <http://rvtc.org/rvtcstudios/>

Get a backstage pass into the world of technology through audio production. If you're looking to launch a career in music, radio, live sound or entertainment business, you've come to the right place. Learn studio maintenance, audio production and entertainment business law. This course offers hands-on use of microphones, mixers, speakers, and portable digital audio workstations. Software includes Pro Tools, Logic and Soundtrack Pro.



DE0102-02 MAT Video Production Pathway

3-4 elective credits

- Open to:** Grades 11 & 12, no video background required
- Prerequisite:** Computer skills, Algebra I, instructor interview; students should also have a home computer with internet access
- Scheduled:** Full year, 1st block at RVTC
- Home Page:** <http://rvtc.org/rvtcstudios/>

Learn the basics of video production through digital storytelling. During this class we will explore the three phases of video production through hands-on activities. Get an introduction to special effects for video and non-linear editing with Final Cut Studio while making short movies. The Video Production Pathway includes a separate class on Motion Graphics using Apple Motion. During this class we will explore the world of 3D animation for professional looking graphics.



DE0102-03 MAT Audio Engineering (Distance Ed)

3-4 elective credits

- Open to:** Grades 11 & 12, no musical background required
- Prerequisite:** Computer skills, Algebra I, instructor interview; students should also have a home computer with internet access
- Scheduled:** Full year, 1st block online (Distance Education Network) for 2 hours per day

Home Page: <http://rvtc.org/rvtcstudios/>

Get a backstage pass into the world of technology through audio engineering. If you're looking to launch a career in music, radio, live sound or entertainment business, you've come to the right place. Learn studio maintenance, audio production, entertainment business law and live sound reinforcement. This course provides not only the theory of what goes on inside the equipment but offers hands-on use of microphones, mixers, speakers and portable digital audio workstations. Software includes Pro Tools, Logic and Soundtrack Pro.

DE0103 MAT Video Production II

1 embedded Science*, 2-3 elective credits
Articulation Agreements: See program instructor for details

- Open to:** Grade 12, no musical background required
- Prerequisite:** Grade of 70 or better in MAT I with at least one pathway of Video
- Scheduled:** Full year, 2nd block
- Home Page:** <http://rvtc.org/rvtcstudios/>

If you are thinking about a career in Digital Video Production then this course is for you. During MAT Video II we will take your video skills to the next level. In this course we will work with you to develop a portfolio to get you into college or jump start your career. We will cover topics such as; Commercial Production, Movie

Making, Documentary & New production as well as Computer Generated Effects and Practical effects (on-camera effects). Students who successfully complete the MAT Video II program may be eligible for Apple's Final Cut Pro 101 Certification Exam.

DE0103 MAT Audio Engineering II

1 embedded Science*, 2-3 elective credits
Articulation Agreements: See program instructor for details

- Open to:** Grade 12
- Prerequisite:** Grade of 70 or better in MAT I with at least one pathway of Audio
- Scheduled:** Full year, 2nd block
- Home Page:** <http://rvtc.org/rvtcstudios/>

Take your technical production skills to the next level. If you're going to be involved in professional audio and video production, you need to know your way around digital audio workstations. Students will learn Audio applications for internet audio, video games, live sound, broadcasting, sound design for film and much more. Digital audio is everywhere. This course will give you the skills you need to get your start in the expanding field. Oh-yeah, don't forget to tell Mom you get a science credit and opportunity to earn college credit when you take both years!

MAT Audio Engineering II is offered at RVTC and online. To get more info about how our online courses work, visit our Distance Ed Home Page:

<http://www.rvtc.org.den>

** The student must score a 3 or 4 on 90% of the program competencies in order to become a "successful" program completer and earn the embedded credit.*

Business & Financial Services

Overview

- Managerial Skills and Activities
- Entrepreneurship – How to Start Your Own Business
- Customer Sales & Service
- Marketing & Advertising
- Accounting Functions
- Banking & Loan Activities
- Leadership & Teamwork
- Communication Skills
- Employability & Career Development Skills
- Business Ethics

Career Opportunities

- Retail
- Banking Industry
- Personnel Management
- Small Business Ownership
- Recordkeeping & Accounting
- Marketing

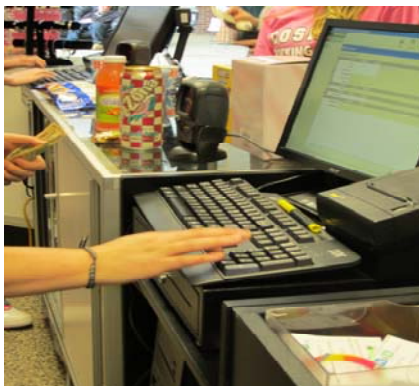
College Credit Opportunity

- Community College of Vermont
- Vermont Technical College

Credentials

- Brainbench Business Fundamentals
- Brainbench Customer Assistance
- Brainbench Business Math
- National Retail Federation Customer Service

** The student must score a 3 or 4 on 90% of the program competencies in order to become a "successful" program completer and earn the embedded credit.*



638 Business & Financial Services I

3-4 elective credits

Open To: Grades 11 and 12 (10 with permission)
Prerequisite: Keyboarding Skills
Scheduled: Full Year, 2 hours per day

Accounting is the language of business. It is the planning, recording, analyzing and interpreting of financial information that provides an overall picture of the financial health of a business. This program allows students to learn the proper accounting procedures for all types of businesses from the corner store to the largest of corporations. As part of this course students will apply accounting concepts using both manual and automated systems. Real life simulations will be used to give students on the job training and hands on experience doing accounting work for a business. In addition students will learn several software programs in Microsoft Office (Word, Excel, Publisher, PowerPoint and Access) and spend a considerable amount of time discussing personal finance. In preparation for the second year of this program, students will begin the process of creating a business plan which will be fully developed during the final year of this course and serve as the capstone project. All students

enrolled in the Business & Financial Services program will participate in DECA (An Association of Marketing Students) and in the operation and management of the Campus Connection school store. Students may obtain national certifications in Business Fundamentals, Business Mathematics and/or Financial Planning.



639 Business & Financial Services II

1 emb English, 1 emb Math*, 1-2 elective*

Open To: Grades 11 and 12
Prerequisite: Grade of 70 or better in Business & Financial Services I or written instructor permission
Scheduled: Full Year, 2 hours per day

Students in the Business & Financial Services II program study entrepreneurship and small business management. Entrepreneurship focuses on recognizing a business opportunity, starting a business based on the recognized opportunity, and operating and maintaining that business. Students will focus their studies in the areas of business law, marketing, customer service, human resources, business ethics, and financial management. Each student in the program will create a comprehensive business plan for their own business venture during

the first semester and then start that business in the second semester. Students will also continue to develop their skills in using the Microsoft Office software programs. Throughout the year students will participate in job shadows at area businesses that will extend their learning beyond the classroom. All students enrolled in the Business & Financial Services program will participate in DECA (An Association of Marketing Students) and in the operation and management of the Campus Connection school store. Students may obtain national certifications in Business Fundamentals, Customer Assistance, and/or Retail Industry Knowledge.

Health Careers

Overview

- Licensed Nurse Assistant Training
- Emergency First Aid
- CPR & AED for Workplace and Community

Career Opportunities

- Nursing
- Licensed Nurse Assistant
- Dentist
- Dental Hygienist/Assistant
- Physician
- Physician Assistant
- Physical Therapist/PT Assistant
- Occupational Therapist/OT Asst.
- Veterinarian
- Veterinary Technician
- Radiology Technician
- Respiratory Therapist
- Medical Assistant
- Massage Therapist

College Credit Opportunity

- 3 Credits* – River Valley Community College

Credential

- Licensed Nurse Assistant
- American Red Cross CPR, AED, and Emergency First Aid for Workplace & Community
- *The student must score a 3 or 4 on 90% of the program competencies in order to become a “successful” program completer and earn the embedded credit.*

*There may be a fee associated with transcribed credit - contact the RVTC Guidance Office at 802-885-8305 for more details.

800 Health Careers I

4 elective credits

Open to: Grades 11 & 12
Prerequisite: Biology, Algebra I recommended
Scheduled: Full year, Two hours per day

The Health Careers Program is open to junior and senior high school students. This program is designed to prepare students for success in further education in health care related programs and/or to provide the skills for entry-level positions in health care. The Health Careers Program allows students, while still in high school, to determine if health care is the career they desire. Instruction includes ethics of health care, communications skills, nutrition and wellness, body systems and hands-on training in patient care, emergency first aid, CPR and AED. See your counselor for credit information.



801 Health Careers II

1 embedded Science*, 3 elective credits

Open to: Grade 12
Prerequisite: Grade of 70 or better in Health Careers I, LNA or other certificate for entry level position in health care
Scheduled: Full year, Two hours per day

Students will continue their studies in the health career theme. Year two includes the VT State Board of Registration approved Licensed Nurse Assistant (LNA) program. Successful completers will be prepared to sit for the LNA exam. Students will participate in various job shadowing and clinical rotation experiences in a variety of health care settings. Completers of the Health Careers Program will be better prepared for rigorous post-secondary programs in a wide range of health care fields. In *Health Careers II* students will participate in an intensive field work experience in a variety of areas. A senior seminar will focus on the development of workplace communication, organization and time management skills. Students will spend time researching college choices and completing applications. They will also be eligible for dual enrollment in college level courses held in the HC classroom. Successful completers will be awarded three fully transferable college credits in “Medical Terminology”.



Culinary Arts

Overview

- Hands-on training with the latest techniques and equipment
- Develop practical skills in the commercial kitchen; bake shop, and River Valley Cafe
- Gain leadership skills through the local SkillsUSA Chapter
- Take part in state competitions
- Gain cooperative work experience

Career Opportunities

- Chef
- Baker
- Chef
- Restaurant Owner or manager
- Food Stylist
- Food Photographer
- Personal Chef
- Nutrition and dietary specialist
- Caterer
- Food and kitchen equipment sales representative

College Credit Opportunity

- New England Culinary Institute

Credentials

- ServSafe

Dining is a leisurely experience, but the process of preparing the meal is fast-paced. Culinary Arts is a highly creative area of study that can take you in many directions. This program offers studies in Culinary Arts for students interested in preparing for careers in the food service industry. The chef instructors of this program teach in the specially equipped commercial kitchen. The class operates like an actual food service facility. Students are taught to care for and operate kitchen equipment, while learning to prepare and serve food as they

rotate. Our facility is designed to stimulate the typical foodservice workplace. A large part of our training is developing good employability skills: these skills include attendance, communication, and organization, and task completion, problem solving, and interacting with others. These skills are just as important as your practical skills to be successful in the program. After graduation, you can continue your education or head to work in an industry that is starving for culinary talent.

758 Culinary Arts I

3-4 elective credits

Open to: Grades 11 and 12 (10 with permission)
Prerequisite: None
Scheduled: Full year, 2 hours per day

Level One students learn the basics of safety, sanitation, knife skills, reading and following recipes as they rotate through the kitchen and bakeshop.

759 Culinary Arts II

1 embedded Math, 2-3 elective credits*

Open to: Grades 11 and 12
Prerequisite: Grade of 70 or better in Culinary Arts I
Scheduled: Full year, 2 hours per day

Level Two students who are serious and motivated to continue their knowledge and skills will train in the kitchen, bakeshop and the café. They will have the opportunity to gain a national credential "ServSafe" through the National Restaurant Association.

Culinary Arts Dual Enrollment

Open to: Qualified Seniors Only
Prerequisite: Grade of 80 or better in Culinary Arts II and a desire to continue your culinary studies beyond high school.

RVTC has collaborated with the prestigious New England Culinary Institute (NECI) for a course designed for students who plan to pursue culinary arts beyond high school. The course was developed to meet NECI's rigorous technical and general education standards. The hours go beyond the scheduled school day, and classes are held during school vacations.

Hospitality and Recreation Management

Program Highlights

- Recreation and leisure studies
- Event Coordination
- Team work and Leadership
- Customer Service
- Communication skills

Career Opportunities Areas

- Events Coordinator
- Ski Resort Management
- Concert Production
- Hotel Management
- Internet Travel Advisor
- Marketing

College Credit Opportunity

- Johnson State College
- Clemens College (*Formerly the International College of Hospitality Management*)
- Paul Smith's College

Credential

- Springer/Miller Resort Management System
- National Retail Federation for National Certificate for Customer Service

Distance Education: This program may be taken online from home high school.

635 Hospitality and Recreation Management I

3-4 Elective Credits*

Open to: Grades 11 and 12 (10 with permission)
Prerequisite: None
Scheduled: Full year, Two hours per day

The world of Hospitality isn't just about Travel Agencies and Hotel Keeping, **it's resorts, private clubs, cruise lines, event planning** and there are over 200 more career possibilities. The Hospitality and Recreation program will provide you with an overview of the many fun, challenging and rewarding careers in the ever-growing hospitality industry. Students will pursue these interests through **classroom activities, field trips, practical industry related experiences and guest speakers**. Participating in this program you will gain knowledge and the necessary skills to seek employment within the recreation industry or to further your education at a post-secondary institution. All students in the Hospitality and Recreation Program will participate in DECA (an association of marketing students). Each year the Hospitality and Recreation Program plans and participates in a destination field trip. In the past, classes have been to Disney World, Florida, a three-day cruise to the Bahamas, New York City, and Virginia Beach to name a few. Where do you see yourself going?

636 Hospitality and Recreation Management II

3-4 Elective Credits*, 1 Embedded Math

Open to: Grades 11 and 12
Prerequisite: Grade of 70 or better in Hospitality I
Scheduled: Full year, Two hours per day

Students will continue their studies of the Hospitality and Recreation Management industry. As a level II student, you will continue to develop essential skills needed to be successful in business to include, but not limited to, event management, business communication, leadership, teambuilding, recreational activities coordination, marketing, sales, and employee relations. As part of the Level II class, you will work in the River Valley Café by serving and managing the dining room. Students will also spend time researching and visiting prospective post-secondary education facilities where they could continue their studies. Level II students also participate in an annual destination class field trip.

Human Services

Overview

- Early Childhood Development and Services
- Counseling and Mental Health Services
- Family and Community Services

Career Opportunities

- Teacher-Elementary
- Early Childhood Education Professional
- Child Care Professional
- Instructional Paraeducator
- Social Worker
- Counselor
- Psychologist
- Teacher-Preschool

College Credit Opportunity

- Community College of Vermont

Credential

- Community CPR and First Aid
- Vermont Child Care Apprenticeship Program Certificate/s of Proficiency

There may be a fee associated with transcribed credit - contact the RVTC Guidance Office at 802-885-8305 for more details.

Graduates of the Human Services Program at the River Valley Technical Center may be eligible for advanced standing at the Community College of Vermont. Students experience learning activities, curriculum, and evaluation processes that are equivalent to CCV courses. Through a scenario-based assessment process, students have the opportunity to practice, apply and demonstrate their learning and may earn 12 credits toward an associate degree in Early Childhood Education. These credits may be also be used toward completion of the Childcare Development Associate (CDA) credential.

765 Human Services I

3-4 elective credits

Open to: Grades 10-12
Prerequisite: None
Scheduled: Full year, 2 hours per day

The Human Services curriculum will provide the student with an opportunity to study human development and investigate social development issues across the human life span as well as those of people with disabilities. Students will gain the basic skills and knowledge needed to enter the human services system as a provider of services and/or care in the areas of early childhood, elementary education, gerontology, and special populations services. Classroom work will acquaint the student with professional and paraprofessional careers and occupations, interpersonal communication skills, ethics and legal issues, CPR and first aid skills, and human development. In addition to academic work, students spend time in supervised settings in various community agencies.

The student must score a 3 or 4 on 90% of the program competencies in order to become a "successful" program completer and earn the embedded credit.

766 Human Services II - Early Childhood Education

1Emb. Social Studies*, 2-3 elective credits

Open to:	Grades 11 and 12
Prerequisite:	Grade of 70 or better in Human Services I or written instructor permission
Scheduled:	Full year, 2 hours per day

Human Services II prepares students to concentrate in one or more of the following areas: Infant and Toddler Services, Preschool Services or School Age Services, counseling or a specific concentration of the student's interest. Students will learn to observe children, understand human development at various ages, develop skills to create a safe and healthy environment, and guide children through various learning experiences. They spend extensive time placed in settings working with professionals in their area of concentration. Cooperative Education placements and apprenticeships are also available to level II students. Other opportunities include building student leadership skills through SkillsUSA activities and recertification in Infant, Child and Adult CPR and First Aid.

Information Technology

Overview

- Website Development, Programming, Animation, A/V Production, "Technology Essentials"
- Hands-On Computer Systems

Career Opportunities

- Website Development
- Animator
- Network Administration
- Computer Repair and Support
- Programmer

College Credit

- RVCC (up to 12 credits)*

Certification

- CompTIA A+
- CompTIA Net+

*There may be a fee associated with transcribed credit - contact the RVTC Guidance Office at 802-885-8305 for more details.

** The student must score a 3 or 4 on 90% of the program competencies in order to become a "successful" program completer and earn the embedded credit.*

785 Website Development, Photoshop, Intro to Game Development, Programming, Animation

"Technology Essentials"

(Audio & Video offered in partnership with Media Arts & Technology)
3-4 elective credits

Open to:	Grades 11 and 12, 10 w/permission
Prerequisite:	Basic keyboarding skills
Scheduled:	Full year, 2 hours per day

Technology Essentials will team with the MAT offering to give students choice in the area of website development, Photoshop, flash animation, video production, audio engineering and game design programming.

Photoshop

Create artistic images and photographs using Photoshop. Add drama and depth to composite images. Use what the pros use to edit your images for print or web publication. **Photoshop is offered during one of the three MAT rotations.**

Flash Animation

Go beyond the basics with Flash animation. Flash allows you to animate text, drawings and still images. Action Script, the Object-

oriented language built into Flash provides greater control. Flash can be used to create interactive tools such as navigation buttons and menus. **Flash is offered during one of the three MAT rotations.**

Intro to Game Development/Programming

This ten-week course will provide an opportunity to learn basics of game development as you develop skill as a programmer. We will cover basic skills and concepts in *Alice*, a program which allows you to create a virtual 3D world while introducing you to methods, conditions, functions and control statements. With *Alice* you will immediately see how animation programs run while seeing the relationship between the programming statements and the behavior of objects in the animation. The final project will be the development of a simple game. **This course is offered Quarter Four.**

Website Development

HTML, CSS, Dreamweaver, FTP, Servers and more: these are areas we will cover in website development. This quarter will give you the "need to know" information as you develop your own website. Go beyond the boring "point and click." Learn to customize layouts, control the style on every page from one location, insert audio and video files, turn a series of pictures into a slide show and many other features that moves your site from plain to one that grabs attention! **Website Development is offered during one of the three MAT rotations.** Successful completion of "Technology Essentials" is recommended for enrollment in Hands-On Computer Systems.

787A Hands-On Computer Systems/Website Level II

1 embedded Math*, 2-3 elective credits

Open to: Grades 11 and 12
Prerequisite: Keyboarding skills; Basic computer navigation skills
Scheduled: Full year, 2 hours per day

This program offers an in-depth study of computer components and operating systems. All class members have the opportunity to build a complete computer system. Through a combination of classroom lecture, hands-on activities, and labs, students learn how to order parts, assemble and configure a computer, install software, and troubleshoot both hardware and software problems. Students learn best practice in maintenance and safety issues. Students will be responsible for maintaining computer equipment in the classroom and lab. All areas of study will incorporate best practice in maintenance and safety issues as they work in a cooperative learning environment. Students will work primarily on Windows machines with limited exposure to Macintosh and Linux systems. Students will have an opportunity to participate in SkillsUSA at local, state and national levels. Students will be prepared for a national certification exam, CompTIA's A+ and can earn up to three college credits at the River Valley Community College. Students who successfully complete Technology Essentials, will have the option of taking Website Development Level II during quarters three and four. This will be offered in a combination classroom and online environment.

Law Enforcement

This program covers the many subsystems within Law Enforcement and the Criminal Justice System.

Overview

- Crime Scene Investigation
- Fingerprinting
- First Aid
- Criminal Law
- Accident Investigation
- Building Searches
- Patrol Procedures

Career Opportunities

- Police Officer
- Probation Officer
- Security Officer
- Forensic Technician
- Correctional Officer
- Criminologist
- Deputy Sheriff
- State Trooper
- Juvenile Officer

College Credit Opportunity

- Community College of VT **
- NH Community College **
- Frederick Community College**

Credentials

- Emergency Response (First Responder)
- CPR/AED
- HazMat Awareness
- National Incident Management System
- Introduction to Incident Command for Law Enforcement
- Multi-Hazard Emergency Planning for Schools
- Emergency Response to Terrorism

775 Law Enforcement I

3-4 elective credits

Open to: Grades 11 & 12
Prerequisite: Signed Medical Release
Scheduled: Full year, 2 hours per day

Students in this level will get an

introduction and overview of law enforcement. Through practical applications, classroom learning and technology, students learn what it takes to become a law enforcement officer. Topics covered include police work, court procedure and corrections with a priority in the overview of the criminal justice process.

775A Law Enforcement II (Intro to Criminal Investigation)

1 embedded Social Studies*, 2-3 elective credits

Open to: Grade 12
Prerequisite: Grade of 70 or better in Law Enforcement I
Scheduled: Full year, 2 hours per day

This program is a continuation of Law Enforcement I and is designed to acquaint the student with the procedures, techniques, legal concerns, and general problems associated with a criminal investigation. Merging classroom lectures and practical exercises in the program permits students to comprehend the various investigative procedures.

** The student must score a 3 or 4 on 90% of the program competencies in order to become a "successful" program completer and earn the embedded credit.*

*** Students may need to incur a fee for credentialing credit – contact the RVTC Guidance Office at 802-885-8305 for more details.*



Manufacturing

Overview

To prepare students for the wide variety of careers related to:

- Manufacturing
- Tool Design
- Engineering Technology

Career Opportunities

- Computer Numerical Control (CNC) Operator
- CNC Programmer
- All Around Machinist
- Tool Maker/Machinist
- Machine Operator

College Credit Opportunity

- River Valley Community College (Project Running Start)
- Keene State College

Credential

- National Institute for Metalworking Skills (NIMS) credential in seven different areas.

Manufacturing Technology:

The purpose of this 2 to 3 year course is to provide “hands-on” training in manual and computer numerical control (CNC) machining techniques that will prepare graduates for entry-level jobs as CNC Machine Operators, Machinists and programmers. Students will learn to operate more than 20 different machine tools, including milling machines, engine lathes, precision grinders and fully automated CNC machining centers. The sparkling clean, “state-of-the art” manufacturing lab is one of only two NIMS (National Institute for Metalworking Skills) certified training centers in Vermont. All

students have the opportunity to earn NIMS credentials, which are recognized across the country as the premiere, competency-based certification for machine operators and machinists. In addition, all hours accumulated in this training program count towards the Vermont Adult Apprenticeship Program. If your passion is making things by hand and seeing how they work, this course is for you!

745 Manufacturing Technology I *3–4 elective credits*

Open to: Grades 10-12
Prerequisite: Successful completion of Algebra or permission of the instructor
Scheduled: Full year, 2 hours per day

Students participating in **Manufacturing Technology I** will examine, practice, master and eventually integrate many industry current processes and systems into solutions for “real world” manufacturing problems. Through this in-depth, applied engineering curriculum, students will gain the knowledge base and specific skill sets necessary to gain entry-level employment within the manufacturing industry as well as go on to post-secondary programs in engineering technology. Students will learn to safely set-up and operate up to 19 different types of industry current manual and computer controlled manufacturing equipment.

Manufacturing is a “hands-on” curriculum that has been designed to ensure that students can meet or surpass the minimum standards set forth by the following:

- National Institute for Metalworking Skills, Inc.

(NIMS) National Certificate Program

- Vermont Frameworks (as they relate to Machine Trades Competencies)
- Local, Regional and National Manufacturing Employers
- SkillsUSA: Leadership Training as well as Precision Machining and Automated Manufacturing competitions

In addition to the eight credentialing areas incorporated into the NIMS Guidelines, Manufacturing I will also integrate the following manufacturing concepts:

- Industrial Blueprint Reading including Geometric Dimensioning and Tolerances
- Computer Aided Drafting (CAD) and Parametric Solid Modeling (Inventor ®)
- Computer Aided Manufacturing (CAM) using Mastercam®
- Computer Numerical Control Machining (2D and 3D Turning and Milling)

746 Manufacturing Technology II *1 embedded Math, 2-3 elective credits*

Open to: Grades 11 & 12
Prerequisite: Successful completion of Manufacturing Technology I
Scheduled: Full year, 2 hours per day

Students participating in **Manufacturing, Level II** will refine their skills as machinists and problem solvers. They will take the basic operational skills they mastered in Manufacturing Level 1 and apply them to engineering problems of increased complexity. They will progress from manufacturing process generalists to highly trained application specialists in a variety of disciplines. There is a strong emphasis on technical mathematics at this level, primarily in the areas of geometry and trigonometry. As such, students completing both levels of this curriculum can earn 1 math credit towards graduation.*

Engineering Technology

Overview:

To prepare students for the wide variety of careers related to:

- Engineering
- Engineering Technology

Career Opportunities

- Mechanical Engineer
- Electrical Engineer
- Architectural Engineer
- Civil Engineer
- Engineering Technician
- CADD Operator
- CNC Operator

College Credit Opportunity

- Rochester Institute of Technology (up to 12 credits)
- Keene State College

Credential

- Certified SolidWorks Associate (CSWA)

Contact the RVTC Guidance Office at 802-885-8305 for more details.

** The student must score a 3 or 4 on 90% of the program competencies in order to become a "successful" program completer and earn the embedded credit.*

737 Engineering Technology

3-4 elective credits

Open to: Grades 10 -12
Prerequisite: Successful completion of Geometry or permission of the instructor
Scheduled: Full year, 2 hours per day

DESIGN IT! DRAW IT! MAKE IT!

Do you:

- Like to invent?
- Like figuring out how things work?
- Like to work with computers?
- Like math or science?

Ever thought of becoming an engineer and engineering technician? Spend the first year of this two-year program tearing apart

and 3D modeling a complex machine like a working internal combustion engine. Then use industrial machinery, such as lathes and mills, to actually make a complex machine of your own to take home! Design, build, and program an industrial robot to perform every day tasks! Explore civil engineering by learning to survey, architectural engineering by drawing house plans, and electro-mechanical engineering through UVM'S annual TASC (Technology and Society Connection) competition. Students completing this program go on to college for engineering or to technical school to become engineering technicians and CADD operators. College credit is available through this program.

738 Engineering Technology II

1 embedded Math, 2-3 elective credits*

Open to: Grades 11 and 12
Prerequisite: Grade of 70 or better in Engineering Technology I or permission of the instructor. Students who have completed Intro to Engineering & Design at Green Mountain Union High School or Bellows Falls Union High School are also eligible.
Scheduled: Full year, 2 hours per day

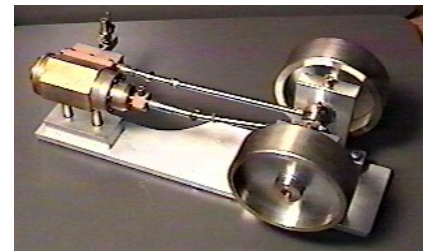
The first semester of Engineering Technology II focuses on applied physics. We will study:

- Engineering Systems
- Mechanical Advantage and Complex Mechanisms
- Thermodynamics and Heat Transfer
- Basic Electricity and Electronics
- Fluid Systems
- Statics and Strengths of Materials
- Kinematics

We will also continue to develop skills in SolidWorks®. Our goal is to have students ready to take the Certified SolidWorks® Associate (CSWA) certification exam by the conclusion of their second year. This is a nationally recognized credential for 3D CADD programs.

Engineering Design and Development

is the title of the second semester course. Through this course, students will take a "real-world" engineering and design problem and bring it from ideation to implementation in just over four months time. Once complete, students will present their finding to a panel of industry experts. Students may enter their design projects in state and national competitions and could earn prizes and travel. There is a strong emphasis on technical mathematics at this level, primarily in the areas of geometry and trigonometry. As such, students completing both levels of this engineering curriculum can earn 1 math credit towards graduation.*



Adult Education

Daytime Programs

All of the programs listed in this book are also available to adults in our region on a space-available basis. Classes meet two hours per day, five days a week, and follow the RVTC annual calendar; however, adults may also access our day programs for shorter periods of time, based on a specific need or interest. Vermont adults without a high school diploma, or who have a GED, may access RVTC daytime programs for free. There is a reasonable tuition charged to adults with a high school diploma. The Adult Education Coordinator is willing to work with you if you need financial assistance. Financial assistance may be available through the Vermont Student Assistance Corporation's Non-Degree Grant Program.

Evening & Weekend Courses

Adult Education evening and weekend courses run throughout the year and offer a wide variety of courses at very reasonable prices. Courses range from one-day workshops on computer applications, to a fifteen-week course on Computer Numeric Control. The Adult Education Coordinator is willing to develop course offerings for just about any topic provided there is enough community interest. Employers are encouraged to access these programs for staff development or to contact us to arrange for specific training for their staff. Additionally, financial assistance may be available through the Vermont Student Assistance Corporation's Non-Degree Grant Program. New courses are constantly being developed. To see an up-to-date list, visit RVTC.ORG and click on Continuing Education.

Statement of Non-Discrimination - River Valley Technical Center

The River Valley Technical Center does not discriminate on the basis of race, color, religion, national origin, gender, sexual orientation, age, or disability in admission or access to, or treatment or employment in, its programs and activities. Any person having inquiries concerning the River Valley Technical Center's compliance with the regulations implementing Title VI, Title IX, Section 504 or other state or federal non-discrimination laws or regulations is directed to contact:

Judith Pullinen, Director, River Valley Technical Center
307 South Street, Springfield, VT 05156, 802-885-8300

RIVER VALLEY  TECHNICAL CENTER

307 South Street
Springfield, Vermont 05156

Phone: 802-885-8300

Website: <http://rvtc.org>

Serving:

Bellows Falls Union High School
Black River High School
Fall Mountain Regional High School
Green Mountain Union High School
Springfield High School
Area Adult Students and Employers

“Educating Today’s Students for Tomorrow’s Careers”

