

# Career Pathways



*Tri-County Regional Vocational Technical High School*

# Tri-County Regional Vocational Technical High School

## Auto Collision Repair

### Career Pathways

Skills & Competencies Tri-County Training	Tri-County Diploma or On-The-Job Training	Two-Year or Four-Year College Majors
Frame Inspection and Repair Repairing and Adjusting Outer Panels Metal Welding and Cutting Repairing Mechanical and Electrical Components Preparation and Body Painting	Collision Repair Technician Painting and Refinishing Technician Glass Installation Technician Automotive Reconditioner Automotive Detailer Automotive Recycler Body Shop Owner Insurance Appraiser / Estimator Service Manager Manufacturer Representative	Collision & Refinishing Technology Auto Body Technology Automotive Engineer Mechanical Engineer

**Certification:** Automotive Service Excellence (ASE) Certification  
 General Industry OSHA 10-hour card

**Articulation Agreement:** Universal Technical Institute  
 New England Institute of Technology

# Tri-County Regional Vocational Technical High School

## Automotive Technology

### Career Pathways

Skills & Competencies Tri-County Training	Tri-County Diploma or On-The-Job Training	Two-Year or Four-Year College Majors
General Engine Repair Automatic Transmission Repair & Service Manual Transmission Repair & Service General Suspension & Steering General Brake Service & Repair Basic Electrical/Electronic Systems Repair Heating & Air Conditioning Engine Performance Auto Maintenance & Light Repair Battery Diagnosis General Emissions Diagnosis & Repair ASE Student Certification AYES Student Certification	Diesel Technician Motorcycle Repair Technician Manufacturer Technician Diagnostic Specialist Parts Department Specialist Service Writer Service Manager General Manager Manufacturer Representative Shop Foreman Lead Automotive Technician Shop Quality Control Specialist	Automotive Technology Automotive Engineering Diesel Technology Mechanical Engineering

**Certification:** Automotive Service Excellence (ASE) Certification  
 Automotive Youth Educational Systems (AYES) Certification  
 General Industry OSHA 10-hour card

**Articulation Agreement:** Massachusetts Community Colleges  
 University of Northwestern Ohio  
 Universal Technical Institute  
 New England Institute of Technology

# Tri-County Regional Vocational Technical High School

## Carpentry

### Career Pathways

Skills & Competencies Tri-County Training	Tri-County Diploma or On-The-Job Training	Two-Year or Four-Year College Majors
Print Reading, Estimation and Measuring Set-up, Operate and Maintain Power Equipment Framing Floors, Walls, Ceilings and Roofs Interior and Exterior Trim and Wood Doors Fabricate Counters, Stair Work, Casework and Windows CAD Drawing Concrete Form Work and Pouring Concrete Finishing Roofing and Siding	Rough & Finish Carpenter Cabinet Maker Wood Products Installer Roofer Siding Installer Floor Installer and Refinisher Union Apprentice Cost Estimator Construction Foreman Land Surveyor Building Products Sales/Service Countertop Template & Installation Wall Board Installer Veneer Plastic & Joint Compound Installer Construction Supervisor Home Improvement Contractor	Construction Technology Drafting Technology Civil Engineering Architectural Engineering Industrial Engineering Project Management

**Certification:** 10-Hour OSHA Construction Safety Course Certification  
 NAHB – National Association of Home Builders

**Articulation Agreement:** Massachusetts Community Colleges  
 New England Institute of Technology  
 Wentworth Institute: Construction Materials and Methods  
 Massachusetts Maritime Academy (Academic Prerequisites)

# Tri-County Regional Vocational Technical High School

## Computer Information Systems

### Career Pathways

Skills & Competencies Tri-County Training	Tri-County Diploma or On-The-Job Training	Two-Year or Four-Year College Majors
Data Entry Basic Network Technology Network System Hardware & Software Operations Programming Concepts Utilization of Multimedia Tools Create HTML Documents Use and Support Computer Operating Systems Computer Security and Risk Issues Identify Network Design Concepts Troubleshoot and Maintain Network Performance Hardware Installation, Configuration and Interconnectivity Perform Preventative Maintenance Procedures Troubleshoot Hardware & Software Problems	Customer Support Technician Data Communications Technician Network Installation Technician PC Support Specialist Computer Assembly Technician Software Trainer Computer Repair Technician Computer Sales Representative Web Systems Administrator Computer Programmer Webmaster	Webpage Multimedia Design Computer Programming Game Development Game Design Webmaster Software Engineer Computer Hardware Engineer Interactive Media and Computer Design Computer Information Systems Computer Science Vocational/Technical Instructor Database Administrator Network Engineer

**Certification:** A+ (PC Hardware & Software Repair), CCNA-Cisco Certified Network Associate, MOS- Microsoft Office Specialist Certification, OSHA – 10 Hour Safety Certification, Network + - Configure and Operate Networking Devices, CCENT-Cisco Certified Entry Networking Technician, Microsoft Technology Associate – Windows Server Administration, Microsoft Technology Associate – Security Fundamentals

**Articulation Agreement:** Massachusetts Community Colleges  
 New England Institute of Technology  
 Bristol Community College

# Tri-County Regional Vocational Technical High School

## Cosmetology

### Career Pathways

Skills & Competencies Tri-County Training	Tri-County Diploma or On-The-Job Training	Two-Year or Four-Year College Majors
Customer Service Skills Marketing & Management Activities Proper Shampooing Procedures Blow Dry Styling Techniques Perform Hair / Scalp Treatment Perform Basic Make-Up Application Demonstrate Manicure and Pedicure Procedures Demonstrate Hair Shaping Techniques Perform Hair Coloring Procedures Perform Permanent Waving Procedures Perform Chemical Hair Relaxing Temporary Hair Removal / Waxing	Hairstylist Hair Colorist Nail Technician Esthetician Salon Manager Salon Owner Theatrical Make-Up Artist Manufacturer's Representative Platform Artist Retail Specialist Beauty Consultant Restorative Artist	Fashion and Apparel Design Fashion Merchandizing Entrepreneurial Studies Business Management SPA Esthetician (600 hrs.) Massage Therapist Electrologist (1,000 hrs.) Electrolysis Technician Medical Esthetician (900 hrs.) Barbering Cosmetic Chemist Beauty Editor

**Licensure:** 1,000 hours needed for State Exam are approved by The Board of Registration of Cosmetology

**Certification:** General Industry OSHA 10-hour card

**Articulation Agreement:**

# Tri-County Regional Vocational Technical High School

## Culinary Arts

### Career Pathways

Skills & Competencies Tri-County Training	Tri-County Diploma or On-The-Job Training	Two-Year or Four-Year College Majors
Menu Planning, Ordering, Receiving and Storage Perform Dining Room Service Activities Perform Host or Hostess Activities Orientation to Hotel, Restaurant and Tourism Sales & Marketing Introduction to Banquet and Catering Services Cooking Methods and Food Preparation Preparing Soups, Sauces, Salads Orientation to Garde Manger, Hors d'oeuvres, and Appetizers Prepare Baked Goods Prepare Frostings and Cake Decorating Orientation to baking Prepared baked goods Prepared frosting and finished baked goods Prepared desserts Knife skills Catering skills	Prep Cook Line Cook Sous Chef Chef Cake Decorator Baker Wait Staff Maitre D' Hotel Restaurant Owner Bakery Owner Caterer Meat Cutter Food Service Manager Pastry Chef	Culinary Arts Baking and Pastry Arts Foods & Beverage Management Hotel & Restaurant Management Culinary Nutrition Nutrition Sciences Hotel and Tourist Management Food Science

**Certification:** Certified Culinary Graduate, Pro-Start Certification, Serve Safe Certification,  
 MA Food Handlers Certification  
 General Industry OSHA 10-hour card

**Articulation Agreement:** Massachusetts Community Colleges  
 Bristol Community College  
 Johnson & Wales University  
 Newbury College

# Tri-County Regional Vocational Technical High School

## Dental Assisting Career Pathways

Skills & Competencies Tri-County Training	Tri-County Diploma or On-The-Job Training	Two-Year or Four-Year College Majors
Sterilize instruments Set up instrument trays Take medical/dental histories Take vital signs of patients Provide dental care instructions to patients Make preliminary impressions of teeth Take opposing model-impressions and bite registrations Clean and polish removable appliances Assist the dentist with managing medical and dental emergencies Provide pre- and post-operative instructions as prescribed by dentist Assist at chair side for general dentistry and specialty dentistry Coronal polish teeth Fabricate bleaching trays & sports guards Place dental sealants Perform fluoride treatments Expose dental radiographs (digital & conventional) Take a tooth print impression Assist with amalgam and composite restorations	Dental Assistant Dental Laboratory Assistant Medical Records/Health Information Technician Dental Receptionist Insurance Biller	Dental Hygienist Dental Laboratory Technician Health Information/Medical Records Administrator Radiological Technician Regional Office Manager Dental Assisting Teacher Dental Consultant Dental Management Careers Dental Sales Representative

**Certification:** Dental Assisting National Board Certifications in Radiation Health & Safety and Infection Control, CPR: Health Care Provider Status, General Industry OSHA 10-hour card

**Articulation Agreement:** Massachusetts Community Colleges Porter & Chester Institute (pending)



# Tri-County Regional Vocational Technical High School

## Early Education Career Pathways

Skills & Competencies Tri-County Training	Tri-County Diploma or On-The-Job Training	Two-Year or Four- Year College Majors
Establish and maintain a safe learning environment Establish and maintain a healthy learning environment Establish and maintain a high quality learning environment Identify the theories of human growth and development Facilitate the advancement of physical cognitive, social and emotional competencies Facilitate the advancement of communication and language competencies Facilitate growth and development through creative expression Establish and apply positive guidance techniques Identify the characteristic and build relationships with families Demonstrate knowledge and implement various assessment techniques Develop effective management practices Demonstrate a commitment to professional standards Apply knowledge of special education laws and regulations Hand hygiene in early care and education settings Maintaining a hygienic environment Develop & implement developmentally appropriate activities to support children's grown & learning	Teacher Assistant Nanny Certified Pre-School Teacher Full Day Child Care Provider Recreational Aide Family Child Care Provider	Elementary Education Early Childhood Education Special Education Speech Pathology Psychology Sociology Human Services School Psychologist Social Work Occupational Therapy Education (any/all grade levels) Guidance Counselor Criminal Justice Public Policy Child Life Specialist

**Certification:** MA Dept. of Early Education and Care, Teacher Certification, First Aid/CPR/AED  
 General Industry OSHA 10-hour card, Life is Good Play Makers Certification

**Articulation Agreement:** Massachusetts Community Colleges, Community College of RI, Fisher College

# Tri-County Regional Vocational Technical High School

## Electrical

### Career Pathways

Skills & Competencies Tri-County Training	Tri-County Diploma or On-The-Job Training	Two-Year or Four-Year College Majors
Print Reading Basic Concepts of Electrical Theory Use of Electrical Test Equipment Electrical Code Install Electrical Boxes and Fittings Install Conductors Apply Concepts of Commercial, Industrial and Residential Wiring Demonstrate Methods of Overcurrent Protection Identify Principals of Grounding Install and Maintain Lighting and Luminaries Install Security Systems and Fire Alarm Systems Photo Voltaic Motor Controls	Apprentice Electrician Cable TV Technician Fire Alarm Technician Telecommunications Technician Security Systems Technician	Electrical Engineering Technology Electrical Engineer Telecommunications Engineer Electronics Engineer Business

**Certification:** Shop and Related Hours are approved by The Massachusetts State Board of Electrical Examiners, 10-Hour OSHA Construction Safety Course Certification

**Articulation Agreement:** Board of Electricians & Massachusetts Electrical Contractors  
 New England Institute of Technology  
 Wentworth Institute: Circuit Analysis  
 Massachusetts Maritime Academy (Academic Prerequisites)

# Tri-County Regional Vocational Technical High School

## Engineering Technology

### Career Pathways

Skills & Competencies Tri-County Training	Tri-County Diploma or On-The-Job Training	Two-Year or Four-Year College Majors
Demonstrate and Apply the Design Process Develop Problem Solving, Diagnostic and Troubleshooting Skills Calibrate & Use Electronic Devices and Gauges to Solve Problems Define and Describe the Types of Engineering Document and Communicate Engineering Concepts and Systems Explain the Principals of Design Utilize Computer Aided Drafting Understand Circuitual & Electrical Current Identify Mechanical Components and Understand the Manufacturing Process Understand, Program and use CNC Machine Develop and Program a Robot Develop and Plan Methods of Production Understand and Design Simple Aeronautical Systems Understand and Design Basic Architectural Structures Research new Technologies	Civil Engineering Technician Surveying Technician Electrical Engineering Technician Electronic Engineering Technician Electromechanical Engineering Technician Environmental Engineering Technician Industrial Engineering Technician Mechanical Engineering Technician Architecture Technician Manufacturing Engineering Technician	Acoustical Engineer Aerospace Engineer Agricultural Engineer Biomedical Engineer Chemical Engineer Civil Engineer Computer Engineer Electrical Engineer Electronics Engineer Environmental Engineer Industrial Engineer Marine Engineer Nuclear Engineer Petroleum Engineer Mechanical Engineer Architect Manufacturing Engineer

**Certification:** Project Lead The Way, General Industry OSHA 10-hour card

**Articulation Agreement:** Massachusetts Community Colleges  
 Massachusetts Maritime Academy (Academic Prerequisites)

# Tri-County Regional Vocational Technical High School

## Graphic Communications

### Career Pathways

Skills & Competencies Tri-County Training	Tri-County Diploma or On-The-Job Training	Two-Year or Four-Year College Majors
Design & Layout for Digital & Print Publishing Demonstrate Effective Press Practices Bindery & Publishing Distribution Applying Photographic Principles Utilization of Adobe InDesign, Illustrator, Photoshop Creative Cloud Screen Printing Dye Sublimation	Press Operator Plate Maker Screen Printer Bindery Technician Electronic Pre-Press Technician Desktop Publisher Customer Service Representative Quality Assurance Technician Proofreader Printing Equipment Repair Technician	Graphic Design Film / Video Illustration Photography Cinematography Audio and Media Technology Digital Media Production Interactive Media Design Game Developer Printmaker Interior Design Web Design Print Media Printing Management Printing Technology Print Production

**Certification:** Adobe Certified Associated in Photoshop, Illustrator, and InDesign  
 General Industry - OSHA 10-hour card

**Articulation Agreement:** Massachusetts Community Colleges  
 Center for Digital Imaging Arts at Boston University

# Tri-County Regional Vocational Technical High School

## Heating, Ventilation, Air-Conditioning and Refrigeration

### Career Pathways

Skills & Competencies Tri-County Training	Tri-County Diploma or On-The-Job Training	Two-Year or Four-Year College Majors
Print Reading Electrical Controls and Systems Piping, Fittings and Materials Refrigeration Tools and Testing Instruments Installation, Wiring and Service Refrigeration Cycle Concepts of Air-Conditioning Electrical Controls and Systems Heat Pump and Electric Heating Oil and Gas Heat Efficiency, Installation and Service	HVAC/R Installer HVAC/R Mechanic Heating and Cooling Technician Oil Burner Technician Gas Burner Technician Control Wiring Specialist Mechanical Drafter / Design / AutoCAD Sheet Metal Technician Refrigeration Technician Pipefitter	Heating, Ventilation and Air-Conditioning Technology Industrial Engineering Technology Mechanical Engineering Civil Engineering Electrical Engineering Marine Engineering Facility Engineer

**Certification:** 10-Hour OSHA Construction Safety Course Certification  
 EPA Section 608 Technician Certification

**Articulation Agreement:** Massachusetts Community Colleges  
 Massasoit Community College  
 Massachusetts Maritime Academy (Academic Prerequisites)  
 New England Institute of Technology

# Tri-County Regional Vocational Technical High School

## Legal & Protective Services

### Career Pathways

Skills & Competencies Tri-County Training	Tri-County Diploma or On-The-Job Training	Two-Year or Four-Year College Majors
Analyze and interpret laws Collect and analyze forensic evidence Conduct investigative and police procedures Conduct surveillance Demonstrate interviewing techniques Demonstrate appropriate Use of Force and self-defense strategies Draft legal documentation Explain the Firearms Classification System Identify and analyze ethical issues in the field of criminal justice Identify and analyze issues relative to constitutional law and jurisdiction Identify and manage hazards at a crime scene Identify topics relative to the field of criminology Identify the structure of the United States court system Investigate cybercrimes Research laws Secure and process a crime scene Utilize approved First Responder techniques	911 Dispatcher Armed Services Border Patrol Agent Computer Security Specialist Corrections Officer Court Officer Emergency Responder/EMS Worker FBI Agent Firefighter Fish & Game Warden Forensic Technician Homeland Security Officer Immigration Officer Law Clerk Law Student Loss Prevention Officer Paralegal Police Officer Private Investigator Probation Officer Secret Service Security Guard Sheriff Social Worker Victim/Witness Advocate	Criminal Justice Criminology EMT Fire Science Forensic Psychology Forensic Science & Technology Liberal Arts: Legal Studies Paralegal Studies Paramedic Prelaw Psychology Public Safety/Emergency Management Sociology

**Certification:** 911 Tele-communicator, CERT (Community Emergency Response Team)(pending), CPR/First Aid/AED, OSHA, iSafe, NIMS (National Incident Management System), Youth Cart (pending), Certificate of Introductory Paralegal Studies, Massachusetts Online Ethics Certification

**Articulation Agreement:** Pending

# Tri-County Regional Vocational Technical High School

## Medical Careers

### Career Pathways

Skills & Competencies Tri-County Training	Tri-County Diploma or On-The-Job Training	Two-Year or Four-Year College Majors
Health Care Office Management Administering Comfort Measures Assisting with Nutrition and Hydration Understanding Emergency Procedures Demonstrating a Knowledge of Basic Laboratory Skills Knowledge of Health Related Specialties Completing Certification Processes, i.e.: CPR, First Aid, Certified Nursing Assistant Medical Terminology Learning and Application of all CNA Skills in Hospital and Long Term Care Setting Growth and Development Knowledge and Application in Daycare Facility Alzheimer's Care and Clinical Application	Certified Nursing Assistant Certified Home Health Aide Medical Office Assistant First Responder	Registered Nurse Licensed Practical Nurse (1 yr program) Occupational Therapy Physical Therapy Pharmacy Lab Technician Operating Room Technician Radiology Radiological Technician Respiratory Technician Exercise Science Sports Medicine Forensics Paramedic (Certificate Program) Therapeutic Massage Physical Therapy Assistant Psychology Physician Assistant Surgical Technology

**Certification:** Massachusetts Department of Public Health Certified Nursing Assistant (CNA), Healthcare Provider Basic Life Support CPR/AED/First Aid Training, American Heart Association, General Industry OSHA 10-hour card, Dean Vaugh Medical Terminology Certificate, National Safety Council Emergency Medical responder, Alzheimer's Association "Caring for People with Alzheimer's Disease" certificate

**Articulation Agreement:** Massachusetts Community Colleges

# Tri-County Regional Vocational Technical High School

## Metal Fabrication

### Career Pathways

Skills & Competencies Tri-County Training	Tri-County Diploma or On-The-Job Training	Two-Year or Four-Year College Majors
Welders Structural Iron Worker Sheet Metal Worker Sheet Metal Assembler Helper General Industrial Worker	Welding Technician Sales Person Machine Operator Pipe Fitter Boilermaker	Welding Educator Materials Engineer Welding Engineer Business Owner Underwater Welder Metallurgist Researcher Welding Inspector

**Certifications:** American Welding Society (AWS)  
Construction Industry OSHA 10-hour card

**Articulation Agreement:**



# Tri-County Regional Vocational Technical High School

## Plumbing and Hydronic Heating

### Career Pathways

Skills & Competencies Tri-County Training	Tri-County Diploma or On-The-Job Training	Two-Year or Four-Year College Majors
Print Reading Knowledge of Steel Pipe, Copper Pipe, Cast Iron Pipe and Plastic Pipe Names, Classifications and Sizing of Fittings Principles of Water Supply Drainage Waste and Vent/Piping Servicing of the Plumbing System Fuel Gas Systems	Apprentice Plumber Apprentice Pipefitter Licensed Plumber Licensed Pipefitter Sprinkler Fitter Water Filtration Technician Heating Contractor Gas Service Technician Home Inspector Irrigation System Technician Plumbing Contractor	Plumbing Technology Civil Engineer Mechanical Engineer Construction Technology Facilities and Environmental Engineering

**Certification:** Shop Hours and Tiers 1 & 2 of Plumbing Education are approved by Massachusetts Board of State Examiners of Plumbers and Gas Fitters (requires state license), 10-Hour OSHA Construction Safety Course Certification

**Articulation Agreement:** New England Institute of Technology  
 Massachusetts Maritime Academy (Academic Prerequisites)  
 JATC Plumbers & Pipefitters Local 4