

## AUTO BODY REPAIR

**Curriculum and materials:**

- Auto Collision Repair and Refinishing (Goodheart-Wilcox)

**Text reading level:**

- 10th grade

**Pre and/or Concurrent Recommendations at home district:**

- Basic math (fractions, decimals)

**Technical skills needed/developed:**

- Basic computer skills
- Welding MIG & STRAW
- Metal fabrication
- Auto body repair
- Auto body refinishing
- Paint mixing and color matching
- Appraisal costs
- Repair costs
- How to use adhesives and fillers

**Professional skills needed/developed:**

- Intrinsic motivation
- Time management
- Strong work ethic
- Organization
- Communication
- Problem solving and troubleshooting
- Critical thinking
- Follow safety procedures and instructions
- Reliability and dependability
- Collaboration
- Accept and apply feedback

**Dress Code:**

- Work boots, long pants, and shirts with sleeves
- Safety glasses (provided by CTE)
- Any other specific PPE required for safely working in and around the lab

**Testing/Certification:**

- Auto Collision Repair and Refinishing (Goodheart-Wilcox)
- NOCTI Exam
- Precision Exams
- Technical Endorsement



## AUTOMOTIVE TECHNOLOGY

**Curriculum and materials:**

- Automotive Technology: A Systems Approach*
- Identifik and All-Data*

**Text reading level:**

- 12th grade+

**Pre and/or Concurrent Recommendations at home district:**

- Pass English 10

**Technical skills needed/developed:**

- Reading and understanding technical manuals, schematics, flow charts, and wiring diagrams
- Understand and verbalize industry specific language
- Computer skills including typing, information literacy, and record keeping
- Fine motor skills and spatial awareness
- Ability to regularly lift and handle 50+ pounds

**Professional skills needed/developed:**

- Ability to communicate
- Follow safety procedures and instructions
- Intrinsic motivation
- Strong work ethic
- Work independently
- Collaborate with others
- Critical thinking
- Problem solving/troubleshooting
- Time management
- Reliability and dependability

**Dress Code:**

- Work boots, long pants, and shirts with sleeves
- Safety glasses (provided by CTE)
- Any other specific PPE required for safely working in and around the lab

**Testing/Certification:**

- ASE Student Certification
- Valvoline Oil Change Certification
- Hunter Tire Machine, Balancer and Alignment Certification
- Snap-On Scan Tools
- Precision Exams
- Technical Endorsement

**Integrated Credits:**

- ELA

## CONSTRUCTION TECHNOLOGY

**Curriculum and materials:**

- Modern Carpentry 13th Edition* (Hardcover and E book)

**Text reading level:**

- 9th grade

**Pre and/or Concurrent Recommendations at home district:**

- Pass Algebra I

**Technical skills needed/developed:**

- Construction Math: measurement, layout, geometry, formulas, equations, estimate materials, estimate labor
- Read construction drawings/blueprints
- Dimensioning
- Computer Skills: Google Classroom, Google Drive, Google Sheets
- Development of hand-eye coordination
- Ability to successfully use a variety of tools and machines to process materials for a building project
- Understand the phases of construction

**Professional skills needed/developed:**

- Responsibility
- Self-awareness
- Life-long learning
- Problem solving
- Discipline and work ethic
- Collaborate with others
- Time management
- Follow safety procedures and instructions
- Reliability and dependability

**Dress Code:**

- Work boots, long pants, and shirts with sleeves
- Safety glasses (provided by CTE)
- Hard hats (provided by CTE)
- Any other specific PPE required for safely working in and around the lab.

**Testing/Certification:**

- OSHA 10 Safety Certification
- Precision Exams
- Technical Endorsement

**Integrated Credits:**

- Math



## COSMETOLOGY

**Curriculum and Materials:**

- Milady Standard Cosmetology, 14<sup>th</sup> Ed*
- Pivot Point
- Hands on Practical

**Text reading level:**

- 12th grade

**Pre and/or Concurrent Recommendations at home district:**

- Pass: Algebra I, Health, English 10, Biology
- Chemistry, Business

**Technical skills needed/developed:**

- Permanent waving
- Chemical treatments
- Sanitation and hygiene
- Blow drying
- Hair care
- Hair styling (formal and informal)
- Client consultation
- Business management
- Manicure and pedicure
- Waxing
- Facials

**Professional skills needed/developed:**

- Time management
- Personal hygiene
- Accept constructive feedback
- Effective communication
- Work independently
- Organization
- Attention to detail
- Follow safety procedures and instructions
- Reliability and dependability

**Dress Code:**

- Black/white shoes - top of foot must be completely covered (NYS rules/regulations)
- Black dress pants
- Black polo or black button up collared shirt

**Testing/Certification:**

- NOCTI Exams
- Technical Endorsement
- NYS Cosmetology Licensure Examination
  - \*Hourly Requirement: Verified 1,000 hours over a two-year period to be eligible to apply for the exam

**Integrated Credits**

- ELA

*Attendance is crucial to meet the hours for liscensing.*

## CRIMINAL JUSTICE

**Curriculum and Materials:**

- Introduction to Criminal Justice 9th Edition*
- NYS Penal Law, NYS Vehicle and Traffic Law, NYS Criminal Procedure Law, US Constitution
- FEMA Independent Study Courses
- Federal Court of Appeals Publications*(website)
- US Supreme Court Case Publications*(website)
- Community partner presentations

**Text reading level:**

- 12th+

**Pre and/or Concurrent Recommendations at home district:**

- Sociology and Psychology
- Forensic Science
- Pass Physical Education

**Technical skills needed/developed:**

- Ticketing
- Handcuffing
- Traffic stops
- Crime scene processing
- Fingerprinting
- Evidence identification
- Application of law
- Corrections standards
- Case studies
- Report writing

**Professional skills needed/developed:**

- Keen observation and attention to detail
- Time management
- Critical thinking and problem solving
- Active listening and learning
- Teamwork and leadership
- Written and verbal communication
- Follow safety procedures and instructions
- Reliability and dependability

**Dress Code:**

- School appropriate-daily
- Business casual-industry visits

**Testing/Certification:**

- NYS Pre-Assignment Security Guard
- Red Cross First Aid/CPR/AED
- NYS Opiate Overdose Training
- Stop-the-Bleed Training
- FEMA/NIMS
- Precision Exams
- Technical Endorsement

**Integrated Credits:**

- Participation in Government & Economics



## CULINARY ARTS

**Curriculum and Materials:**

- Prostair NY State
- The Culinary Professional*
- ServSafe

**Text reading level:**

- 10th grade

**Pre and/or Concurrent Recommendations at home district:**

- Algebra I -(fractions, decimals, conversions)
- Family and Consumer Science
- Business

**Technical skills needed/developed:**

- Knife skills
- Cooking and baking basics and food preparation
- Menu planning
- Sanitation and food safety
- Kitchen accident prevention and response
- Fire safety and risk management
- Proper equipment usage
- Dining room service
- Customer relations
- Event preparation

**Professional skills needed/developed:**

- Critical thinking
- Problem solving and troubleshooting
- Communication
- Personal hygiene
- Time management
- Teamwork and leadership skills
- Follow safety procedures and instructions
- Multitasking skills
- Reliability and dependability
- Planning and organization
- Collaboration
- Creativity

**Dress Code:**

- Chef uniform (provided by CTE)
- Safety shoes: non skid (student provided)
- No jewelry, piercings, long nails
- Hair pulled back (tucked in hat)

**Testing/Certification:**

- ServSafe Certification
- Precision Exams
- Qualters/ProStart Certification
- Technical Endorsement

**Integrated Credits:**

- ELA

99% of current CTE students report their program develops important employability skills for future success.

## CYBERSECURITY AND COMPUTER TECHNOLOGY

**Curriculum and Materials:**

**Year 1:**

- CompTIA A+ Core 1 and Core 2 CertMaster
- Cisco Introduction to Cybersecurity
- Programming Essentials in Python

**Year 2:**

- CompTIA Network + CertMaster
- Cisco Cybersecurity Essentials
- Programming Essentials in Python

**Text reading level:** 12th+ grade

**Pre and/or Concurrent Recommendations at home district:**

- Algebra I -(fractions, decimals, conversions)
- Basic computer skills

**Technical skills needed/developed:**

- Fundamentals of computer hardware and software
- Typing skills
- Security and networking
- Linux
- IT support
- Installation and configuration of PCs
- Configure common features such as network connectivity and email for Android and Apple iOS mobile operating systems.

**Professional skills needed/developed:**

- Time management
- Communication
- Attention to detail
- Critical thinking
- Troubleshooting
- Organization
- Ability to process and implement verbal and written instructions
- Willingness to learn from and accept feedback
- Reliability and dependability

**Dress Code:** School appropriate

**Testing/Certification:**

**Year 1:**

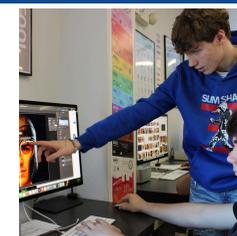
- Competency in IT Hardware and Network Support Information
- Competency in IT Software and Systems Support Information.

**Year 2**

- Competency in Networking
- Technical Endorsement

**Integrated Credits**

- Applied Math
- Advanced Placement and Articulated Credit options are available



## DIGITAL MULTIMEDIA

**Curriculum and Materials:**

- Adobe Creative Suite (Photoshop/Illustrator & Premiere Pro)
- Mac Computer Lab
- DSLR Cameras
- Professional grade camcorders
- Wacom Tablets
- Professional grade studio equipment

**Text reading level:**

- 11th-12th grade

**Pre and/or Concurrent Recommendations at home district:**

- Art Class
- Pass English 10

**Technical skills needed/developed:**

- Compositional eye
- Creative writing
- Audio mixing and recording
- Use various software technologies as tools for visual expression
- Website design
- Utilize special effects
- Design and cameras
- Motion graphics
- TV and radio production
- Movie industry studies
- Typography
- Client communication
- Computer skills

**Professional skills needed/developed:**

- Time management
- Attention to detail
- Intrinsic motivation
- Work independently
- Teamwork
- Critical thinking
- Reliability and dependability
- Communication

**Dress Code:**

- School appropriate

**Testing/Certification:**

- Adobe Certification Exam
- Precision Exams
- Technical Endorsement

**Integrated Credits**

- ELA

HFM CTE has over 45 articulation agreements with colleges and universities across NY State for students to earn college credit after successful completion of their program.

## EMERGENCY MEDICAL TECHNOLOGY

**Curriculum and Materials:**

- Emergency Care, 15<sup>th</sup> Edition*

**Text Reading Level:** 12<sup>th</sup> grade+

**Pre and/or Concurrent Recommendations at home district:**

- Fire Science and Rescue
- Pass Living Environment/Biology

**Technical skills needed/developed:**

- Basic math skills for conversions and calculations
- Manual dexterity for medical interventions
- Basic life support techniques
- Vital signs measurement
- Primary and secondary patient assessment
- Trauma patient assessment
- Response to various emergency situations including cardiac, respiratory, diabetic, and seizure
- Safe operation of equipment and devices
- Professional and patient communication
- Ethical decision-making

**Professional skills needed/developed:**

- Reliability and dependability
- Patient confidentiality
- Personal hygiene
- Mutual support and collaboration
- Risk level assessment
- Prioritization of tasks and needs
- Composure under stress
- Time management
- Stress management
- Effective communication

**Dress Code:**

- School appropriate-daily
- Business casual-industry visits
- Closed-toe shoes
- PPE provided by CTE

**Testing/Certification:**

- Emergency Medical Technician
- Emergency Vehicle Operations
- CPR
- Stop-the-Bleed
- Narcan Administration Certification





## ENVIRONMENTAL CONSERVATION

### Curriculum and Materials:

- New York Logger Training - Forestry Ecology & Silviculture
- 10-hour OSHA Training
- Best Management Practices for Water Quality
- NYS Department of Env. Con. web resources
- Land surveying and laser leveling
- Heavy equipment operation and maintenance

**Text Reading Level:** 9<sup>th</sup>-10<sup>th</sup> grade

### Pre and/or Concurrent

### Recommendations at home district:

- Algebra I -(Fractions, decimals)

### Technical skills needed/developed:

- Sharpen, adjust, and handle a chainsaw
- Tree scaling and identification
- Compass use and pacing to calculate acreage
- Hand-eye coordination, especially during equipment operation
- Heavy equipment operation & maintenance
- Comprehension of technical manuals
- Use of surveying equipment for elevation, horizontal, and angle measurements
- Metal working elective including cutting, welding and tapping threads

### Professional skills needed/developed:

- Effective communication
- Collaboration
- Time management
- Problem solve and troubleshoot
- Respectful of others and property
- Reliability and dependability
- Follow safety procedures and instructions

### Dress Code:

- Work boots, long pants, and shirts with sleeves
- PPE including safety glasses and hard hats (provided by CTE)
- Appropriate clothing for all weather conditions including rain, snow, and wind

### Testing/Certification:

- NOCTI Forest Products and Processing Technical Assessment
- NCCT Heavy Equipment Operation Technical Assessment
- NYS Game of Logging Chainsaw Training Level 1
- DEC Erosion & Sediments Control Training
- OSHA 10 Construction Safety Course

**Integrated Credits:** Math

## FIRE SCIENCE & RESCUE

### Curriculum and Materials:

- Essentials of Firefighting

### Text reading level:

- 10th to 12th grade

### Technical skills needed/developed:

- Student must be able to lift 50 lbs.
- CPR and Stop-the-Bleed
- Proper use of PPE
- Operation of fire apparatus and equipment
- Search and rescue procedures
- Fire behavior recognition and fire dynamics
- Hose handling, deployment, and advancement

### Professional skills needed/developed:

- Effective communication
- Collaboration and teamwork
- Time management
- Problem solving and troubleshooting
- Be respectful of others and their property
- Reliability and dependability
- Follow safety procedures and instructions

### Dress Code:

- School appropriate-daily
- Business casual-industry for visits
- Closed-toe shoes
- Fire apparatus and attire is provided by CTE to be used in the lab setting
- Safety PPE provided by CTE will be needed as instructed

### Testing/Certification:

- Basic Exterior Firefighting Operations Certificate (OFPC BEFO)
- First-Aid, Narcan, CPR, Stop the Bleed

During their senior year, all CTE students complete a two-week internship allowing students to apply their skills in real career settings.



## FOUNDATIONS OF FOOD

### Curriculum and Materials:

- The Culinary Professional
- ServSafe Essentials

### Text reading level:

- Differentiated texts per students' abilities

### Technical skills needed/developed:

- Basic math and science skills for following and converting recipes
- How to measure ingredients
- Cooking and baking basics
- Knife skills
- Safety skills
- Work force preparation
- Sanitation and cleaning
- Understanding the food service industry
- Identifying ingredients

### Professional skills needed/developed:

- Healthy personal hygiene
- Communication skills
- Time management
- Organization
- Follow directions and expectations
- Follow safety procedures and instructions
- Stay on task
- Ability to work independently and in a group setting

### Dress Code

- Closed toe shoes
- Hair pulled back (tucked in hat)
- No nail polish or jewelry
- Uniform provided by CTE (hat, apron, pants, chef coat)

### Testing/Certification:

- 2 Year Completer Certificate
- Beef U Online - program certificate

Various supports are available to all students at CTE including:

37 teachers and TAs

2 special education teachers

2 school counselors

1 instructional coach

2 school administrators

## MEDICAL ASSISTING

### Curriculum and Materials:

- Comprehensive Medical Asst. 5th Edition
- Understanding Anatomy & Physiology 3<sup>rd</sup> Edition (Thompson)
- Medical Terminology 350, 2nd Edition

### Text reading level:

- 10th-12th grade+

### Pre and/or Concurrent

### Recommendations at home district:

- Pass Biology or Living Environment
- Pass Algebra I
- Chemistry

### Technical skills gained/developed:

- Vital signs
- Phlebotomy & injections
- ECG
- Organ dissections
- Medical terminology
- Administrative practices & procedures
- Laboratory and diagnostic procedures
- First Aid/CPR
- Pharmacology
- Administering medications
- Medication math

### Professional skills needed/developed:

- Empathy & compassion
- Organization and critical thinking
- Effective written and verbal communication skills
- Accept constructive criticism and guidance
- Maintain confidentiality
- Follow safety procedures and instructions

### Clinical Requirements:

- Hospital dress code: no visible tattoos, no facial piercings, hair must be of a natural color, and no artificial nails (per hospital policy)
- Uniform which is the student's responsibility to purchase:
  - Scrub pants and black top, closed toe shoes or sneakers in white, gray or black
- Physical, immunization record, Flu vaccine, Tuberculosis Screen

### Testing/Certification:

- NOCTI Exam
- CHP Certification for Clinical Medical Assistant
- CPR
- Stop-the-Bleed
- Narcan Administration Certification

### Integrated Credits:

- Anatomy & Physiology (Science)
- English



## NEW VISIONS EDUCATION

### Curriculum and Materials:

- The First Days of School
- The Classroom Management Book
- How To Deal With Difficult Parents
- Foundations of Education

### Text reading level:

- 11th+ grade

### Pre and/or Concurrent

### Recommendations at home district:

- Pass English 11
- Pass U.S. History

### Technical skills needed/developed:

- Create assessments and rubrics
- Attention to detail
- Observational skills and note taking for off-site classroom observations
- Develop and teach lessons
- Research educational systems
- Determine classroom management techniques
- Best practices in the classroom
- Theory and practice of professional ethics
- Next Gen Standards and NYS Learning Standards

### Professional skills needed/developed:

- Collaboration
- Public speaking
- Time management
- Problem solving
- Observe, provide, and accept constructive feedback
- Goal setting
- Reliability and dependability

### Dress Code:

- School appropriate, daily
- Business casual for observations in the field

### Testing/Certification:

- Up to 9 college credits available

### Integrated Credits:

- C.H.S
- English
- Participation in Government
- Economics

99% of current CTE students report that they feel prepared for life after high school graduation.

## NEW VISIONS HEALTHCARE

### Location:

- On site at Nathan Littauer Hospital in Gloversville 4 days a week
- Wednesdays at CTE for College level English and 12th Grade PIG and ECO

### Pre and/or Concurrent

### Recommendations at home district:

- Hospital physical, and immunization requirements
- Pass Biology or Living Environment, Algebra, and Chemistry Regents exams

### Technical skills needed/developed:

- Knowledge of Biology, Chemistry and Life Sciences
- Knowledge of medical terms and abbreviations
- Medical ethics, Pharmacology, Anatomy and Physiology
- Capstone research project culminating in a professional community presentation

### Professional skills needed/developed:

- Critical thinking skills related to medical field, observation, reasoning and judgment
- Confidentiality
- Independence and maturity in professional health care setting
- Good communication with patient and health care team, hospital personnel and medical professionals
- Time management
- Organization
- Follow safety procedures and instructions

### Dress Code:

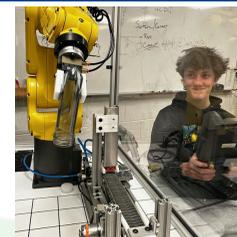
- Black medical scrubs
- Student ID badge assigned at start of school year

### Testing/Certification:

- American Heart Association Basic Life Support/First Aid/AED Certification
- Narcan Administration Certification
- Stop-the-Bleed

### Application Requirements:

- Two letters of recommendation
- Admissions essay
- Interview with the instructor
- Cumulative GPA of 85+



## ROBOTICS AND ENGINEERING TECHNOLOGY

### Curriculum and Materials:

- Introduction to Digital Electronics
- Principles of Electric Circuits

### Text reading level:

- 10th grade

### Pre and/or Concurrent

### Recommendations at home district:

- Algebra I - 75% or higher on Regents exam
- Algebra II
- Technology courses

### Technical skills needed/developed:

- Collect and organize data and analyze data to draw conclusions
- Work with industrial electromechanical systems
- Understand and use basic circuit analysis and components
- Use instrumentation (DMM, Oscilloscope, function generator, etc.)
- Implementation of PLCs, HMIs, relays, [input and function blocks] motors, pneumatics, hydraulics

### Professional skills needed/developed:

- Work both independently and collaboratively
- Reliability and dependability
- Problem solving and troubleshooting
- Proactive work practices
- Time management
- Organization
- Follow safety procedures and instructions
- Foundational skills and knowledge

### Dress Code:

- School appropriate-daily
- Business casual-industry visits

### Testing/Certification:

- Up to 14 college credits available
- Precision Exams
- Technical Endorsement

### Integrated Credits:

- Math

During their two years at CTE, students can earn a minimum of 7 credits towards high school graduation.

## SKILLED TRADES

### Curriculum and Materials:

- Residential Plumbing
- Solar and Alternative Energy
- Electrical Residential
- HVAC

### Text reading level:

- 10th-11th grade

### Pre and/or Concurrent

### Recommendations at home district:

- Pass Algebra
- Skilled Trades courses

### Technical skills needed/developed:

- Occupational safety
- Dexterity and hand-eye coordination
- Heating
- Ventilation
- Plumbing
- Soldering
- Electrical panel, circuit, wiring, and measurement

### Professional skills needed/developed in program:

- Leadership
- Independent work
- Collaborate with others
- Follow safety procedures and instructions
- Problem solving and troubleshooting
- Time management
- Organization
- Reliability and dependability (attendance is crucial)

### Dress Code:

- Work boots, long pants, and shirts with sleeves
- Safety glasses (provided by CTE)
- Hard hat (provided by CTE)
- Any other specific PPE required for safely working in and around the lab

### Testing/Certification:

- OSHA 10-hr Certificate
- First Aid and CPR Certificate

CTE sponsors a variety of events throughout the school year to support career development and exploration including our Workforce Summit, Women in the Workforce, CTE College Fair, and CareerCon.



## VETERINARY & ANIMAL SCIENCE

### Curriculum and Materials:

- Veterinary Science 9-12: The Classroom Curriculum
- Veterinary Assisting Fundamentals and Applications textbook
- Modern Livestock & Poultry Production textbook
- An Illustrated Guide to Veterinary Medical Terminology textbook
- Pet Emergency First Aid/CPR/Disaster Response (ECSI)

### Text reading level:

- 10th-12th grade

### Pre and/or Concurrent

### Recommendations at home district:

- Pass Biology or Living Env. Regents
- Chemistry (if on a veterinary pathway)

### Technical skills needed/developed:

- Medical terminology, animal anatomy and physiology
- Assess live animals including understanding animal body language and behavior
- Process and implement verbal instructions around live animals
- Technical and formal lab writing skills
- Fine motor skills
- Ability to lift up to 50lbs
- Ability to restrain and handle small and large animals

### Professional skills needed/developed:

- Effective oral and written communication
- Intrinsic motivation and goal setting
- Time management and multitasking
- Independence
- Collaboration
- Organization
- Public speaking
- Critical thinking
- Ability to accept feedback
- Consistent daily attendance
- Willingness to clean and sanitize animal facilities and barns
- Follow safety procedures and instructions
- Reliability and dependability

### Dress Code:

- Scrubs, closed toe shoes, no artificial nails, hair must be pulled back, barn boots

### Testing/Certification:

- Precision Exams: Veterinary Assistant
- ECSI: Pet First Aid, CPR, and Disaster Response
- Technical Endorsement

### Integrated Credits

- ELA
- Science