

# HFM CTE PROGRAMS OF STUDY LEARNING CHARACTERISTICS

## AUTO BODY

### Curriculum and materials used:

- *Auto Collision Repair and Refinishing* (Goodheart-Wilcox)

### Text reading level:

- 10th grade

### Recommendations to take prior to enrollment or concurrently at home district:

- Basic math (fractions decimals)

### Testing/Certification:

- Auto Collision Repair and Refinishing (Goodheart-Wilcox)
- NCOCT exam
- Precision exam
- Technical endorsement

### Technical skills needed/developed:

- Basic computer skills
- Welding MIG & STRSW
- 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/troubleshooting
- Critical thinking
- Follow safety procedures and instructions
- Reliability/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



## AUTOMOTIVE TECHNOLOGY

### Curriculum and materials used:

- *Automotive Technology: A Systems Approach*
- *Introduction to Automotive Technology - CDX Learning*
- *Identifix and All-Data*

### 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

### Recommendations to take prior to enrollment or concurrently at home district:

- Pass English 10

### Testing/Certification:

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

### Professional skills needed/developed:

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

### 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

### Text reading level:

- 12th grade+

## CONSTRUCTION

### Curriculum and materials used:

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

### Recommendation to take prior to enrollment or concurrently 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 eye/hand coordination
- Ability to successfully use a variety of tools and machines to process materials for a building project
- Understand the phases of construction

### Testing/Certification:

- OSHA 10 Safety Certification
- Precision exams
- Technical endorsement

### Professional skills needed/developed:

- Responsibility
- Self-awareness
- Life-long learning
- Problem solving
- Discipline/Work Ethic
- Collaborate with others
- Time management
- Follow safety procedures and instructions
- Reliability/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.
- Hard hats (provided by CTE)

### Text reading level:

- 9th grade



## COSMETOLOGY

### Curriculum and materials used:

- *Milady Standard Cosmetology*
- *Cengage Learning*
- *Milady Theory & Practical Workbooks*
- *Pivot Point*

### Text reading level:

- 12th grade

### Recommendations to take prior to enrollment or concurrently 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
- Perming
- Manicure/pedicure

### Professional skills needed/developed:

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

### Testing/Certification:

- Nocti exams
- Technical endorsement
- NYS Cosmetology Licensure Examination
  - \*Hourly Requirement: Verified 1,000 hours over a two-year period to be eligible for the exam

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



## CRIMINAL JUSTICE

### Curriculum and materials used:

- *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+

### Recommendations to take prior to enrollment or concurrently at home district:

- Sociology/Psychology
- Forensic Science
- Pass Physical Education

### 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

### Dress Code:

- School appropriate-daily
- Business casual-industry visits

### Technical skills needed/developed:

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

### Professional skills needed/developed:

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



## CULINARY ARTS

### Curriculum and materials used:

- Prostart NY State
- *The Culinary Professional*
- ServSafe

### Recommendations to take prior to enrollment or concurrently at home district:

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

### Professional skills needed/developed:

- Critical thinking
- Problem solving and troubleshooting
- Communication
- Personal hygiene
- Time management
- Team & leadership skills
- Follow safety procedures and instructions
- Multitasking skills
- Reliability/dependability

### Testing/Certification:

- Servsafe certification
- Precision exam
- Qualtars/ProStart certification
- Technical endorsement

### Technical skills needed/developed:

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

### Dress Code:

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

### Text reading level:

- 10th grade



## CYBERSECURITY AND COMPUTER TECHNOLOGY



### Curriculum and materials used:

#### Year 1:

- (CompTIA) Testout PC Pro
- Cisco Introduction to Cybersecurity
- Programming Essentials in Python

#### Year 2:

- (CompTIA) CertMaster Learn Network+
- Cisco Cybersecurity Essentials
- Programming Essentials in Python

### Testing/Certification:

- TestOut PC Pro Exam-Year 1
- TestOut Network Pro Exam-Year 2
- Technical endorsement

### Dress Code:

- School appropriate

### Recommendations to take prior to enrollment or concurrently 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/dependability

### Text reading level:

- 12th+ grade

## DIGITAL MULTIMEDIA

### Curriculum and materials used:

- 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

### Recommendations to take prior to enrollment or concurrently at home district:

- Art/Graphic Design class
- Pass English 10
- Computer Science

### Professional skills needed/developed:

- Time management
- Attention to detail
- Intrinsic motivation
- Work independently
- Team work
- Critical thinking
- Reliability/dependability

### Testing/Certification:

- Adobe Certification Exam
- Precision exams
- Technical endorsement

- Compositional eye
- Creative writing
- Audio mixing and recording
- Use various software technologies as tools for visual expression
- Website design
- Utilize special effects
- Graphic design
- Animation
- TV and radio production
- Movie industry studies

### Dress Code:

- School appropriate



# HFM CTE PROGRAMS OF STUDY LEARNING CHARACTERISTICS

## ENVIRONMENTAL CONSERVATION

**Recommendation to take prior to enrollment or concurrently at home district:**

- Algebra I – (fractions decimals)

**Curriculum and materials used:**

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

**Testing/Certification:**

- NOCTI Forest Products and Processing
- NCCER Heavy Equipment Operations
- NYS Game of Logging Chainsaw Training Level 1
- Technical endorsement
- OSHA certification

**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
- Hard hats (provided by CTE)
- Appropriate clothing for all weather conditions including rain, snow, and wind



**Professional skills needed/developed:**

- Effective communication
- Collaborate with others
- Time management
- Problem solve and troubleshoot
- Be respectful of others and their property
- Reliability and dependability
- Follow safety procedures and instructions

**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
- Read and comprehend technical manuals
- Use of surveying equipment for elevation, horizontal, and angle measurements

**Text reading level:**

- 9th-10th Grade

## FOUNDATIONS OF FOOD



**Curriculum and Materials used**

- The Culinary Professional
- ServSafe Essentials

**Text reading level:**

- Differentiated texts per students' abilities

**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

**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

**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

## MEDICAL ASSISTING

**Curriculum and materials used:**

- Comprehensive Medical Asst. 5th Edition
- The Human Body and Health and Illness 7th Edition
- Medical Terminology 350, 2nd Edition

**Recommendations to take prior to enrollment or concurrently at home district:**

- Pass Biology/Living Environment.
- Pass Algebra I
- Chemistry

**Technical skills needed/developed:**

- Manual dexterity
- Phlebotomy
- ECG
- Medical terminology
- Administrative practices & procedures
- Anatomy & Physiology
- Laboratory and diagnostic procedures
- First Aid/CPR
- Pharmacology and administering medication

**Text reading level:**

- 10th-12th grade+

**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

**Testing/Certification:**

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

**Clinical Requirements:**

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

## NEW VISIONS EDUCATION

**Curriculum and materials used:**

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

**Text reading level:**

- 11th+ grade

**Recommendation to take prior to enrollment or concurrently at home district:**

- Pass English II
- 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:**

- Collaborate with others
- Public Speaking
- Time Management
- Problem solve
- Observe and make/take constructive feedback
- Goal setting
- Reliability & dependability

**Dress Code:**

- School appropriate in class
- Business casual for observations in the field

**Testing/Certification:**

- Up to 9 college credits available



## NEW VISIONS HEALTHCARE

**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

**Location:**

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

**Professional skills needed/developed:**

- Critical thinking skills related to medical field, observation, reasoning & 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



**Recommendations to take prior to enrollment or concurrently at home district:**

- Hospital physical, and immunization requirements
- Pass Biology/Living Environment, Algebra, and Chemistry regents

**Testing/Certification:**

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

**Dress Code:**

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

**Application Requirements:**

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

## FIRE SCIENCE



**Curriculum and Materials used**

- Essentials of Firefighting

**Text reading level:**

- 10th to 12th grade

**Testing/Certification:**

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

**Dress Code:**

- School appropriate-daily
- Business casual-industry 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 by Mr. Demars

**Technical skills needed:**

- Student must be able to lift 50 lbs.

## ROBOTICS AND ENGINEERING TECHNOLOGY

**Curriculum and materials used:**

- Introduction to Digital Electronics
- Principles of Electric Circuits

**Recommendations to take prior to enrollment or concurrently at home district:**

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

**Professional skills needed/developed:**

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

**Dress Code:**

- School appropriate-daily
- Business casual-industry visits

**Technical skills needed/developed:**

- Collect, organize, 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

**Testing/Certification:**

- Up to 14 college credits available
- Precision exams
- Technical endorsement

**Text reading level:**

- 10th grade



## SKILLED TRADES



**Curriculum and materials used:**

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

**Technical skills needed/developed:**

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

**Testing/Certification:**

- OSHA 10 hr certificate
- First Aid/CPR certificate

**Text reading level:**

- 10th-11th grade

**Recommendation to take prior to enrollment or concurrently at home district:**

- Pass Algebra
- Skilled Trades courses

**Professional skills needed/developed in program:**

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

**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
- Hard hat (provided by CTE)

## VETERINARY & ANIMAL SCIENCE



**Curriculum and materials used:**

- 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)

**Recommendations to take prior to enrollment or concurrently at home district:**

- Pass Living Environment Regents
- Chemistry (if on a veterinary pathway)

**Professional skills needed/developed:**

- Multitask
- Effective communication (oral and written)
- Intrinsic motivation
- Time management
- Work independently and collaboratively
- Organization
- Public speaking
- Critical thinking
- Ability to accept feedback
- Consistent daily attendance
- Willingness to clean/sanitize animal facilities/barns
- Follow safety procedures and instructions
- Reliability and dependability (attendance is crucial)
- Goal setting

**Technical skills needed/developed:**

- Technical/formal lab writing skills
- Ability to read/understand animal body language/behavior
- Ability to lift up to 50lbs
- Fine Motor Skills/Ability to restrain/handle small & large animals
- Medical Terminology
- Ability to process/implement verbal instructions around live animals
- Animal anatomy and physiology
- Assess live animals
- Dog grooming

**Testing/Certification:**

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

**Dress Code:**

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

**Text reading level:**

- 10th-12th grade