



**ORANGE-ULSTER BOCES**

# CAREER AND TECHNICAL EDUCATION

2022-2023

# AT-A-GLANCE



*For High School Students*



Division of CAREER & TECHNICAL EDUCATION

[OUBOCES.ORG/CTE](http://OUBOCES.ORG/CTE)

# CTE FAQs



## When can I start taking a program at CTE?

Most students are scheduled for CTE when they are in the 11th grade.

## Would I come to CTE every day? How would I get there?

Classes are offered every day in 2 sessions. Your home district is responsible for providing transportation to and from CTE.

- CTE at Amy Bull Crist Area Educational Center:  
AM session 8:05 - 10:35  
PM session 12:30 - 3:00
- CTE (Business Computers Careers & Health Careers) at the Regional Education Center at Arden Hill:  
AM session 7:50 - 10:20  
PM session 12:15 - 2:45

## Can I choose whether I take an AM or PM program?

That depends upon your home school scheduling needs and program availability.

## Are all CTE courses two-year programs?

Most are two-year programs, some are one-year programs.

## Can I get work experience in my chosen field while attending CTE?

Yes, every CTE program consists of both theory and hands-on components to prepare students for their chosen field. Off-campus work is also available during the two-year program.

## Are CTE courses credit bearing?

Yes, all CTE courses offer four credits each year towards your graduation. Depending on your home school and your CTE program, a portion of these credits may be awarded in academic subjects such as ELA, Math, Science, Art, Health, or Physical Education.

## Can CTE courses prepare me for college?

Students may be awarded credits or advanced standing with various colleges who have articulation agreements with Career and Technical Education once they enter post-secondary institutions.

## I want to participate in sports at my home school. Can I still do that?

Yes, you can still participate in activities and sports while attending CTE. However, when possible you may want to enroll in the AM session to ensure arriving at after-school activities on time.

## Are there any costs involved in attending CTE?

Costs for tuition, text books, and transportation are covered by your school district. Some programs require the purchase of uniforms, work boots, safety glasses, or personal tools that are paid for by the student. Financial assistance may be available to qualified students to cover the costs of required uniforms, supplies and tools. See your CTE counselor for more information.

**Talk to your home school guidance counselor for more information.**

**[ouboces.org/CTE](http://ouboces.org/CTE)**

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# APPEARANCE Careers Academy



## COSMETOLOGY

- Learn theory and develop hands-on skills including all aspects of hair, skin and nail care
- Accumulate hours and prepare to obtain a New York State Cosmetology License
- CAREER OPPORTUNITIES:** Hairstylist, Salon Owner/Manager, Color Specialist and more



## ESTHETICS

- Learn about the science of skin, develop hands-on skills including facial and body treatments, waxing and make-up
- Accumulate hours and prepare to obtain a New York State Esthetics License
- CAREER OPPORTUNITIES:** Skin Care Specialist, Spa Owner/Manager, Waxing Technician, Make-Up Artist and more

# CONSTRUCTION Careers Academy



## CARPENTRY

- Learn basic safety, hand and power tool usage, framing of floors, walls, ceilings and roofs, drywall installation and more
- Gain daily practical experience using tools, equipment and machines of the industry
- CAREER OPPORTUNITIES:** Carpenter, Framer, Home Renovator, Home Inspector, and leading to a Bachelor's Degree in Construction Management



## ELECTRICAL CONSTRUCTION TECHNOLOGY

- Learn electrical safety, intro to electrical circuits, electrical theory, device boxes, conductors and cables, electrical construction drawing and more
- Gain daily practical experience working on residential, commercial, and industrial wiring
- CAREER OPPORTUNITIES:** Residential Electrician, Utility Worker, Photovoltaic Installation Technician, and leading to an Associate or Bachelor's Degree in Electrical Construction



## HVAC/PLUMBING

- Learn basic safety, hand and power tool usage, piping and tubing, plumbing blueprint reading, cutting, threading and joining components, soldering and brazing and more
- Gain daily practical experience in all aspects of plumbing and heating
- CAREER OPPORTUNITIES:** Plumber, Pipe Fitter, Sprinkler Installer, HVAC Technician, and leading to an Associate or Bachelor's Degree in HVAC



## WELDING

- Learn contemporary metal joining, cutting and reinforcing processes used in manufacturing and fabricating
- Gain daily practical experience in all welding and cutting processes
- CAREER OPPORTUNITIES:** Maintenance Production, ARC/MIG (GMAW)/TIG (GTAW) Welder, Metal Fabricator, and leading to an Associate or Bachelor's Degree in Welding Technology

# Why CTE?

- Choose from over **30** Programs
- Industry-Certified** Instructors
- Exciting **Hands-On Learning**
- Well-Equipped** Classrooms
- Real-Life** Experiences
- Earn **High School Credit**
- College Credits** Available
- CTE is Essential** to the Economy

**TO LEARN MORE, VISIT**  
[ouboces.org/CTEprograms](http://ouboces.org/CTEprograms)

## CULINARY Careers Academy



### CULINARY FOOD TRADES

- Prepare for careers in the food and beverage industry and in the hotel and restaurant business
- Gain daily practical experience in the use of modern equipment and food preparation for commercial and institutional settings
- CAREER OPPORTUNITIES:** Baker, Cake Decorator, Caterer, Assistant Chef, Assistant Restaurant Manager, and leading to a Bachelor's Degree in Food and Beverage Management or Hospitality Management

## EDUCATION Careers Academy



### EARLY CHILDHOOD DEVELOPMENT AND CARE

- Have a direct focus of study in infant, toddler, and preschool age children
- Gain hands-on, practical experience teaching and running the on-site 3-year-old Preschool program, while having the opportunity to receive the CDA Credential and the NYS Teaching Assistant Certification Level 1.
- CAREER OPPORTUNITIES:** Teaching Assistant, Teacher's Aide, Office Manager, and leading to an Associate or Bachelor's Degree in Early Childhood Education



### EDUCATION AND MANAGEMENT

- Gain hands-on, practical experience teaching and running a 4-year-old Pre-Kindergarten program, while having the opportunity to receive the CDA Credential and the NYS Teaching Assistant Certification Level 1.
- Gain basic knowledge in birth through preschool age child development with a direct focus in Pre-K through school aged children
- CAREER OPPORTUNITIES:** Teacher's Aide, Teaching Assistant, Preschool Teacher, Childcare Director, and leading to an Associate or Bachelor's Degree in Early Childhood Studies



### *Did you know...*

that our **national and NY State-approved CTE programs** lead to **CERTIFICATION OR LICENSING** that meet current industrial standards?

## ENVIRONMENTAL Careers Academy



### ANIMAL SCIENCE (VETERINARY ASSISTANT)

- Receive training in veterinary medicine, farm animal science and zoology
- Gain experience working with live reptiles, small mammals, dogs and farm animals in the classroom or on a school work-site
- CAREER OPPORTUNITIES:** Veterinary Assistant, Farm Animal Caretaker, Dog Groomer and leading to an Associate Degree in Veterinary Technician or Animal Science, or a Bachelor's Degree in Veterinary Science, Zoology, Animal Science or Wildlife Management



### HEAVY EQUIPMENT

- Learn safety, maintenance, operation and repair of heavy equipment and the systems that make them work
- Work and train with excavators, backhoes, bulldozers, skid steers, tractors and other heavy equipment
- CAREER OPPORTUNITIES:** Heavy Equipment Operator, Heavy Equipment Mechanic, Diesel Technician, Forklift Operator, and leading to an Associate Degree in Agricultural Power Machinery or a Bachelor's Degree in Agricultural Equipment Technology

## HEALTH Careers Academy



### DENTAL CAREERS

- Learn to be a Dental Assistant in a challenging and rewarding program that demands versatility and a willingness to assume responsibility for many different tasks
- Develop the skills needed to provide direct patient care in all dental specialties, including orthodontics, pediatric dentistry, periodontics and oral surgery
- Learn the most comprehensive and varied duties requiring both interpersonal and technical skills such as taking x-rays, impressions, four handed dentistry, and so much more
- Enjoy flexible career opportunities as a full-time or part-time Dental Assistant. Work in excellent conditions in a private dental office, V.A. hospital, prison, nursing facility, or dental lab. A career in Dental Assisting can lead to further education in Dental Hygiene or Dentistry.



## EMERGENCY MEDICAL SERVICES

- Develop a fundamental understanding of the human body and how the various body systems interact
- Gain experience addressing a multitude of emergency medical and trauma scenarios
- **CAREER OPPORTUNITIES:** EMT/Paramedic, Firefighter, Healthcare Professional, and leading to an Associate Degree in Paramedic



## EXERCISE SCIENCE AND PERSONAL TRAINING

- Learn how human anatomy and exercise technique work together to improve fitness levels and enhance athletic performance
- Participate in hands-on lab activities and work-based learning opportunities to develop career ready skills in exercise prescription, fitness program design and physical rehabilitation
- **CAREER OPPORTUNITIES:** Personal Trainer, Athletic Trainer, Physical Therapist, Physical Therapist Assistant, Physical Education Teacher, and leading to an Associate or Bachelor's Degree in Exercise Science



## PRINCIPLES OF HEALTH OCCUPATIONS

- Explore many different health careers, learn about the human body and perform care skills
- Look into the world of health science to pursue a future job in this growing industry
- **CAREER OPPORTUNITIES:** Medical Scribe and prepare to take your choice of the following programs in your senior year: Medical Assistant/Allied Health, Nurse Assistant, Pharmacy Tech, EMS, Dental Assistant, Sports Medicine, Medical Administrative Executive Assistant



## ALLIED HEALTH ASSISTANT

- Obtain a wide-array of hands-on training and education necessary to fill a diverse range of duties in the healthcare industry
- Work towards taking the nationally recognized Certified Clinical Medical Assistant Exam
- **CAREER OPPORTUNITIES:** Medical Assistant in various healthcare facilities including physicians' offices, hospitals, medical laboratories, and leading to an Associate or Bachelor's Degree in multiple medical professions



## NURSE ASSISTANT

- Get clinical experience, learn to take vital signs and provide exceptional patient care
- Jump start your essential career to become a Licensed Practical Nurse or Registered Nurse
- **CAREER OPPORTUNITIES:** NYS Certified Nurse Aide, Healthcare Aid, Nursing Attendant, Medical Scribe and can go on to become a Registered Nurse (RN) or earn a Bachelor of Science in Nursing (BSN)



## PHARMACY TECHNICIAN

- Learn pharmacology, uses and side effects of top drugs
- Develop skills for drug dosage calculation and measurements
- **CAREER OPPORTUNITIES:** Certified Pharmacy Technician at pharmacies and hospitals, and leading to an Associate Degree in Pharmacy Technician



## FIRE SCIENCE

- Learn about fire behavior, arson awareness, communications, confined space safety, extrications, building searches and attend live fire training sessions
- Prepare to sit for NYS certification exams including Basic Exterior Firefighting Operations (BEFO), SCBA/Interior Firefighting Operations (IFO) and more
- **CAREER OPPORTUNITIES:** Firefighter, Forensic Technician, Military Firefighter, Fire Dispatcher, 911 Dispatcher, and leading to a Bachelor's Degree in Fire Science



## LAW ENFORCEMENT

- Gain certifications in police mountain bike training, American Heart Association CPR, firearms safety, NYS security officer, and environmental conservation safety
- Learn criminal and civil law, crime scene investigation, firearm safety, defensive tactics, forensic science, criminal trial procedures, and participate in a mock criminal trial.
- **CAREER OPPORTUNITIES:** Prepare for employment with County, State, and Federal governments, and private security, and leading to an Associate or Bachelor's Degree in Criminal Justice Studies

TO LEARN MORE, VISIT [ouboces.org/CTEprograms](http://ouboces.org/CTEprograms)



## COMPUTER PROGRAMMING AND VIDEO GAME DEVELOPMENT

- Learn various computer applications and computer programming languages while developing troubleshooting techniques
- Participate in several robotics competitions and e-sports competitions
- CAREER OPPORTUNITIES:** App Developer, Computer Programmer, Robotics Engineer, Software Developer, Video Game Developer, Web Developer, and leading to industry certification and/or an Associate Degree and/or a Bachelor's Degree in Computer Science or related degree program



## MECHATRONICS AND ROBOTIC ENGINEERING

- Gain an understanding of mechanical, electrical, and computer engineering
- Design and create an innovative product that addresses a real life need or solves a real world problem
- CAREER OPPORTUNITIES:** Engineer, Product Developer, Automation Engineer, Robotic Technician, and leading to an Associate Degree in Mechatronics Design or a Bachelor's Degree in Mechatronics Technology



## ENGINEERING DESIGN AND ARCHITECTURE (CAD)

- Learn about the design process, how to use Autodesk Inventor, and 3D printers/CnC machines to design and create anything from desk lamps to video game prop replicas
- Learn about house design, Autodesk Revit, and building modeling to design and create houses and commercial structures
- CAREER OPPORTUNITIES:** Architect, Engineer, Product Designer, 3D Modeler, Rapid Prototyping/CnC Operator, CAD Operator



## COMPUTER NETWORKING (CISCO CCNA PROGRAMMING)

- Learn about computer networking and cyber security through interactive media and hands-on labs working with actual equipment
- Gain comprehensive knowledge of networking topics, from fundamentals to advanced applications and cyber security
- CAREER OPPORTUNITIES:** Network Technician, Network Engineer, Cyber Security Forensic Expert, Information Security Expert, and leading to industry certification or an Associate or Bachelor's Degree in Information Technology or Cyber Security



## HOSPITALITY/PRO-START

- Learn about the food service industry in a supportive hands-on environment while preparing to move into the workforce
- Gain independence while learning a variety of fundamental culinary real-world skills
- CAREER OPPORTUNITIES:** Cook, Prep Cook, Caterer, Stockroom, Baker, Dietary Aide, Counter Person, Bus Person, Dining Room Server, Dishwasher



## VEHICLE MAINTENANCE

- Gain skills needed for entry level employment in the automotive service industry through hands-on training
- Participate in off-site clinical experiences at automotive dealerships and repair shops
- CAREER OPPORTUNITIES:** Auto Service Technician, Fleet Maintenance Personnel, Mechanical Maintenance Operator and more



## WORKPLACE LEARNING

- Learn how to work in a professional setting at local nursing homes/rehabilitation centers
- Gain skills and knowledge related to careers in dining, custodial and maintenance services
- CAREER OPPORTUNITIES:** Dietary Aide, Counter Person, Bus Person, Dining Room Server, Dishwasher, Stockroom, Prep Cook Housekeeping or Custodian, Laundry Assistant

## GET INVOLVED!

*The following clubs are available through CTE:*

- » SkillsUSA
- » CTE Society for Acceptance
- » Future Educators Association
- » National FFA Organization
- » Health Occupations Students of America
- » National Technical Honor Society



## EARN COLLEGE CREDITS!

Students may be awarded credits or advanced standing with various colleges who have articulation agreements with Career and Technical Education once they enter post-secondary institutions.



[ouboces.org/CTEcollege](http://ouboces.org/CTEcollege)

## TRANSPORTATION Careers Academy



### AUTO BODY/RESTORATION



- Prepare for careers in the field through the use of the latest technologies and state of the art equipment while gaining daily practical experience by working on vehicles
- Learn about collision estimating, damage repair, plastic and aluminum body panels, structural adhesives, airbag and restraint systems, suspension and modified suspension, welding and use of torches, painting and refinishing including custom paint - powder coating, metal fabrication and more.
- **CAREER OPPORTUNITIES:** Collision Repair, Frame and Unibody Technician and Assistant, Refinishing Technician and Assistant, Metal Fabricator, Restoration Technician, Claims Adjuster/Estimator, and leading to an Associate Degree in Collision Repair Technology

### AUTOMOTIVE TECHNOLOGY



- Learn to repair foreign and domestic cars and light trucks using the latest techniques and computerized diagnostic equipment
- Gain daily practical experience by working on vehicles
- **CAREER OPPORTUNITIES:** Auto Technician, Exhaust and Emissions Control Specialist, Brake Specialist, Service Technician, and leading to an Associate Degree in Automotive Technology

### AVIATION



- Develop the skills necessary to obtain a Federal Aviation Administration (F.A.A.) Private Pilot Certificate
- Learn to safely operate an airplane in all phases of flight during one-on-one flight lessons in a state-of-the-art aircraft
- **CAREER OPPORTUNITIES:** Air Traffic Controller, Dispatcher, General Aviation, Corporate Aviation, and leading to a Bachelor's Degree in Aviation Administration or Aeronautical Science

## VISUAL ARTS Careers Academy



### DIGITAL DESIGN AND ADVERTISING



- Apply your creativity, artistic vision and illustration talent for advertising print and digital design
- Gain practical experience in graphic design, illustration, typography, color theory, layout design, basic animation and build your portfolio
- **CAREER OPPORTUNITIES:** Graphic Designer, Illustrator, Multimedia Artist, and leading to a college degree in Advertising Art or Graphic Design

### DIGITAL FILMMAKING AND POST PRODUCTION



- Explore the exciting and expanding world of visual communication by being part of the production process in roles including writer, director, editor, grip and production assistant
- Learn about written film analysis, use of professional production equipment and computer graphics in post production
- **CAREER OPPORTUNITIES:** Independent Producer/Director, Grip/Production Assistant, Videographer/Camera Operator/Camera Assistant, and leading to a Bachelor's Degree in Film and Media

### FASHION AND INTERIOR DESIGN



- Learn basic apparel manufacturing construction/patternmaking techniques and fundamentals of the fashion and interior design industries
- This program combines design theory with hands-on projects. A variety of topics and assignments are incorporated into the curriculum to give students a solid foundation and broad overview of both industries
- **CAREER OPPORTUNITIES:** Textile/Surface Designer, Fashion Merchandiser/Designer, Patternmaker, Fashion Editor, Interior Designer, and leading to a Bachelor's Degree in Fashion Business Management or Textile Development and Marketing

TO LEARN MORE, VISIT  
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*Career and Technical Education at the  
Amy Bull Crist Area Education Center  
53 Gibson Road, Goshen, NY 10924*



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The Orange-Ulster BOCES Career and Technical Education Division is diverse and inclusive, committed to preparing students for college and/or career success in partnership with community business, industry partners, and higher education institutions. As educators, we believe in creating learning environments where all students and staff can achieve their personal goals, feel safe, be respected and supported.



*Division of  
CAREER &  
TECHNICAL  
EDUCATION*

**“Turning Vision Into Reality”**

**845.291.0300 | [ouboces.org/CTE](http://ouboces.org/CTE)**

The Board of Cooperative Educational Services, Sole Supervisory District of Orange-Ulster Counties, operates all programs in compliance with the federal and state laws which prohibit discrimination because of race, color, religion, creed, national origin, political affiliation, sex, age, marital status, sexual orientation, pregnancy, military status, veteran status, genetic predisposition or carrier status, ancestry, disability or any other legally protected status. The Compliance Officer is Kerri B. Stroka, Assistant Superintendent & Title IX/Section 504/ADA Coordinator, (845) 291-0100 Extension 10120.