

DUTCHESS BOCES CAREER & TECHNICAL INSTITUTE

2025-2026 COURSE OFFERINGS

All of our programs offer students the opportunity to gain basic entry level career skills as well as the skills necessary to enter a College or Technical school.

Please note that CTI Courses are not currently National Collegiate Athletic Association (NCAA) approved.

Discover more in-depth information by visiting our website at www.dcboces.org/cti

Agriculture

Careers in Animal & Plant Sciences I & II - Students will develop an understanding of the diverse and profitable fields of Agriculture. A variety of topics are covered including plant and animal biology and technology, food science and safety, wildlife management and environmental conservation, agricultural research, college and career exploration. This program emphasizes hands-on experiences with on-site projects, guest visitors, work placements and related field trips to businesses, organizations, colleges and industry events. Students have the option of choosing the animal or plant track in their second year.

Architecture & Construction

Construction Trades I & II - This program includes coursework in building construction, finish carpentry, masonry, plumbing and basic electricity. Students will be introduced to the tools, methods, and skills needed to gain entry level employment in the construction industry.

Electrical Construction Technology I & II - This program provides students entry level skills in construction electricity. Courses emphasize job safety, electrical theory, electrical calculations, work ethic, proper tool use and exposure to professional opportunities within the trade. First year focus is on residential installations, followed by second year directed at commercial and industrial installations. Students must provide hand tools and codebook.

HVAC I & II - Students learn to install, repair and maintain residential and commercial heating and cooling systems. The program integrates shop operations, job planning and estimating, troubleshooting and installation, maintenance skills, customer service, professionalism, and appropriate work ethic. Students will also be taught how to function as professional trade technicians, leading to future employment opportunities.

Welding & Fabrication I & II - The Welding and Fabrication course is a program geared toward entry level welding and fabrication using various welding techniques on carbon, stainless steel, and aluminum. The first year welding program provides students with the safety knowledge and skills to work in a shop environment both safely and efficiently preparing them for the second year and completion of the program. The second year welding program will provide students the advanced skills and confidence needed to join the welding workforce, including resume writing and job interview preparation.

Arts, Technology & Communication

Graphic Design I & II - Students will be given the opportunity to explore the exciting world of Graphic Arts, Graphic Design, and Multimedia Arts. Students enrolled in this program will develop skills and workplace competencies while exploring the many facets of communication careers. Students use a hands-on learning approach where the emphasis is placed on problem solving skills and communication techniques and processes.

TV/Film Production I & II - This course is an introduction to the field of film and video production. It familiarizes students with the basic principles, theories and techniques in video production. Students will construct storyboards, write scripts, direct shoots, and edit their own projects using equipment provided by the CTI.

Education & Training

Early Childhood Education I - This program provides students with an understanding of the physical, social and mental development of children ages birth to eight. Students will participate in off-site classroom internships.

Early Childhood Education II - This program prepares students to work under the general supervision of a licensed Teacher. Students will cover a range of topics related to pedagogy. Early Childhood Education is recommended prior to Early Childhood Education II.

Health Sciences

Nursing Assistant I - This course is recommended during the student's junior year and includes core competencies specific to the health Occupations. **Good attendance is essential.** Students will be given an opportunity to explore various health care fields. This course is recommended before taking the Nursing Assistant II (CNA) course. The **Home Health Aid (HHA) credential** is now available within the course. The HHA component will focus on the care and monitoring of people with disabilities or chronic illness to assist them with daily living activities. This is a 95 hour credential which includes 15-30 hours of supervised off campus experience. Second year option is the Nursing Assistant II program.

Nursing Assistant II - This course for seniors introduces students to the foundational skills necessary for the study of Nursing. **Good attendance is essential.** Students are given classroom and hands-on lab instruction to prepare them for their off-site clinical rotation at a local nursing facility. Topics include anatomy and physiology, body systems, legal and ethical issues, infection control, patient care and comfort measures, and skills to assist in activities of daily living. Students must be able to work independently and with minimal supervision in an off-site clinical healthcare setting. Successful students qualify to take the CNA exam. Important Notes: *Nursing Assistant I is strongly recommended before taking Nursing Assistant II; work maturity skills essential to success in this program.*

Hospitality & Tourism

Culinary Arts /Restaurant Management I & II - This program for juniors and/or seniors introduces the student to skills in food preparation, baking and pastry arts, safety and sanitation, and culinary hospitality.

Marketing, Sales & Service

Cosmetology I & II - This is a two-year program. Students learn the care of hair, nails and skin. **Good attendance is essential.** Students who successfully complete the program with at least 1000 hours are eligible to take the New York State cosmetology license exam. Successful completion of this program will require students to complete off-site internships.

Esthetics I & II - This is a two year program for students interested in becoming a skincare specialist. **Good attendance is essential.** Students will develop knowledge of skin anatomy and physiology, infection control, disorders and diseases of the skin, skin care product chemistry, and chemical safety. These topics are just a sampling of the 23 chapters covered in the course. Hands-on, practical learning will include basic facials, European facials, specialty facials, body treatments, back treatments, foot and leg treatments and waxing/hair removal. Upon successful completion of the 600-hour Esthetics program, students will be prepared to take the NYS Esthetics Licensing Exam and begin a career in the field of skin care. The course provides many more hours in areas such as lash extensions, makeup, and hair removal. Students can take the waxing exam after the first year provided they are 17 years of age.

Fashion Design & Merchandising I & II - Students in the Fashion Design & Merchandising program gain insight into the fashion and merchandising fields through work in an authentic fashion design setting at the Career & Technical Institute. Supported by state-of-the-art equipment, the curriculum covers such topics as the design and construction of apparel, the study of fabric and color, fashion history, and fashion illustration, as well as jewelry and accessory design.

Information Technology

Computer Networking - This class is designed to provide the student with the technical knowledge required to obtain an entry level job in the field of computer network installation and maintenance. Students will also be prepared to take the Networking Pro Certification Exam. While Computer Hardware Technology is not required as a prerequisite, basic knowledge of the workings of computers will make this class more accessible.

Computer Hardware Technology - (Formerly called A+ Computer Repair.) This class is designed to provide the student with the technical knowledge and skills required for an entry-level position in the information and computer technology career field. Additionally, students will be prepared to take the PC Pro Certification Exam.

Law and Public Safety

Security & Law Enforcement I - The first year of the program is designed as an introduction to the field of criminal justice, covering the components of the criminal justice system (police, courts, corrections), the interactions of these components through the steps in the criminal justice process, as well as the constitutional requirements of due process of law. Students will become familiar with the law, specifically the New York State Penal Law, the Criminal Procedure Law, and the Vehicle and Traffic Law. Students will also be exposed to controversial topics, such as search and seizure, use of force and police defensive tactics. Students will receive a realistic introduction to the popular subject of crime scene investigation. Students will finish the year by demonstrating their knowledge and skills through realistic scenario-based training.

Security & Law Enforcement II - The second year of the program begins with an introduction to criminology, including crime reporting, theories of crime and crime causation. After a brief examination of juvenile delinquency, the focus of the program shifts heavily to the investigation of various types of crimes. Finally, the emphasis of the second year leads to the field of security, including terrorism, threat assessment, as well as crime prevention. Students will have the opportunity to complete training and obtain certifications in CPR and First Aid, an Introduction to the National Incident Management System, an Introduction to the Incident Command System, and both the Pre-Service (8-hour) and In-Service (16-hour) New York State Security Guard Training.

Transportation, Distribution & Logistics

Automotive Technology I & II - This is an exploration of various segments of the automotive field, including in the second year, electronics, on-board computers, OBD I & II, transmissions, drive line and clutches, and engine service.

Small Engine Technology I & II - This program offers students entry level skills in small engine operation, maintenance, and repair. Second year students will focus on the operation, maintenance, and repair of lawn/garden equipment and recreational vehicles.

Related Academics

Career Literacy (CTE English) - All programs offer .5 credit per year in high school English.

Integrated/Specialized Science and Math - as indicated.

DUTCHESS CES

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Dutchess BOCES

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To: Principals and School Counselors
From: Nicholas Millas, Principal CTI
Date: January 23, 2025
Re: New Program at CTI

We are in the process of writing the program approval for Emergency Medical Technician to begin in the 2025-2026 school year. When we release the application process in the coming weeks, you will see this course listed in the dropdowns. While we will not be able to include this as part of our 10th grade visits, we will include the description to students in our presentation. We are also working on the recruitment materials and the information to add to our placemat.

Program Name: Emergency Medical Technician (EMT)

Program Length: 2 Years

Credits each year:

EMT- 3
English- .5
Science- .5

Program Description:

The Emergency Medical Technician course places a special emphasis on the knowledge and skills needed in medical emergencies. Topics typically include clearing airway obstructions, controlling bleeding, bandaging, methods for lifting and transporting injured persons, simple spinal immobilization, infection control, stabilizing fractures, and responding to cardiac arrest. The course will also cover the legal and ethical responsibilities involved in dealing with medical emergencies. This course will prepare students to obtain certification in Emergency Medical Response (EMR), CPR, First Aid, and Incident Command System (ICS). Both years English and Science will be integrated at .5 credit hours for each.

Dutchess County Board of Cooperative Educational Services

Administrative Offices: 845.486.4800
www.dcboces.org

Participating Districts: Arlington | Beacon | Dover | Hyde Park | Millbrook | Pawling | Pine Plains | Poughkeepsie | Red Hook | Rhinebeck | Spackenkill | Wappingers | Webutuck

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