



CTE CAREER & TECHNICAL EDUCATION
at the Center for Instruction, Technology & Innovation



CAREER & TECHNICAL EDUCATION
COURSE CATALOG
2021-2022

WHAT *is* CTE?

CTE focuses on exploring different occupations and trades through hands-on learning. We offer 17 programs to tap into your existing talents while developing other skills that may lead to a lifelong career choice.



TABLE OF CONTENTS

Welcome Letter	4
School Districts Served	5
General Information.....	6/7
Advanced Metal Manufacturing.....	8/9
Auto Body Repair	10/11
Auto Technology.....	12/13
Computer Coding	14/15
Construction Technology	16/17
Cosmetology	18/19
Culinary Arts	20/21
Digital Media Technology	22/23
Early Childhood Education.....	24/25
Heavy Equipment Repair and Operation	26/27
Industrial Electrical Technologies	28/29
New Vision Allied Health	30/31
New Vision Specialized Careers.....	32/33
Nursing Assistant	34/35
Public Safety and Justice	36/37
Welding Technology	38/39



WELCOME LETTER



Welcome!

Do you like to work with your hands? Do you like to make or manipulate things? Do you like to problem solve? Are you a creative person? If you answered yes to any of these questions, then you are starting in the right place to Build Your Future!

On behalf of the CTE faculty and staff at CiTi BOCES, I am excited to share the 2021-2022 CTE Course Catalog. Our intent is to offer emerging and innovative programs centered around the technical, academic and employability skills necessary to prepare students for a competitive twenty-first century career and the education necessary to enter a post-secondary institution.

At CiTi BOCES, we offer seventeen distinct CTE programs for students to choose from. No matter your interests, CTE more than likely has something for you. Programs are taught by professionals who have worked or currently work in their field and know the technical skills needed to give our students a leg up over the competition. Please read over this catalog and work with your school counselor to determine what program may be best for you.

We are hoping you will consider joining our CTE family and allow us to help Build Your Future! If you have any concerns or questions about a specific course, please contact one of our CiTi counselors at 315-963-4251. We look forward to working with you and offering you the best educational experience possible.

Sincerely,

Michael D. Thurlow

Career and Technical Education Principal



SCHOOL DISTRICTS SERVED



Altmar-Parish-Williamstown
Central School District



Central Square
School District



Fulton City School District



Hannibal Central
School District



Mexico Academy and
Central School District



Oswego City
School District



Phoenix Central
School District

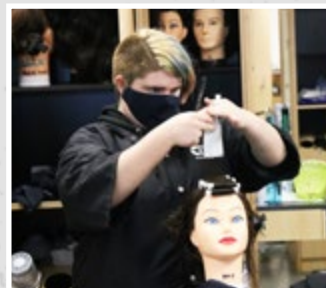
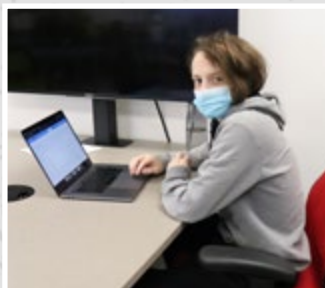


Pulaski Academy
and Central School District



Sandy Creek Central
School District

BUILD Your FUTURE
with Career & Technical Education



GENERAL INFORMATION

MARLA BERLIN

Director of College & Career Education

MIKE THURLOW

CTE Principal

DAVID EASTMAN

*Counselor for
Central Square Central School District,
Oswego City School District
& Sandy Creek Central School District*

COLEEN MARTIN

*Counselor for
Altmar-Parish-Williamstown
Central School District, Hannibal Central
School District and Pulaski Academy
& Central Schools*

RYAN WARNER

*Counselor for
Fulton City School District,
Phoenix Central School District and
Mexico Academy & Central School District*

CiTi BOCES BOARD OF EDUCATION

John Shelmidine, **President**; Sandy Creek Central School District

Donna Blake, **Vice-President**; Hannibal Central School District

Darlene Upcraft, Mexico Academy and Central School District

Vanessa Haskins, Central Square Central School District

Nicole Nadeau, Altmar-Parish-Williamstown Central School District

Kevin Dix, Phoenix Central School District

Dave Cordone, Fulton City School District

Ted Williams, Pulaski Academy and Central School District

Brian Haessig, Oswego City School District

The Center for Instruction, Technology & Innovation shall continue its long-standing policy of providing educational opportunities for all students who wish to enroll in any course without regard to race, sex, religion, national origin or creed. The Title IX Compliance Officer is Mr. Mark LaFountain.

GENERAL INFORMATION

Program Length: The course descriptions indicate whether a program is designed for one or two years. In order for students to be exposed to the entire curriculum (and be prepared for a licensing or certification exam, if applicable) they must participate in the entire program. Students may choose to participate in a 2 year program for only one year. For example, a senior has the option of enrolling in a two-year program for one year. This student will participate in the basic learning of the first year.

Industry Alignment: As NYSED approved CTE programs, our curriculum is aligned with the appropriate industry standards. For example, the welding curriculum mirrors the American Welding Society standards for entry-level welders; the Nursing Assistant curriculum is directly aligned with the NYS standards for students preparing for the NYS Certified Nurse Aide certification.

Integrated Academic Coursework: Through the NYSED CTE program approval process, our program curriculum is reviewed by a minimum of three academic teachers from outside of our organization. Those teachers compare the rigor of the academic content (i.e., math, English, science) and determine if students enrolled in the CTE program can also be awarded academic credit. For example, NYS certified math teachers have reviewed the Outdoor Power Equipment Technology curriculum and have determined that students are engaged in a sufficient amount of math curriculum at the commencement level for math credit to be awarded. Integrated academic coursework takes place within the CTE program instruction on a regular basis.

College Credit Opportunities: Most programs offered through CTE have an articulation agreement with a community college, university or trade union that allows the student to apply knowledge already mastered toward specific courses. Many CTE programs also offer college credit directly through successful participation in the CTE program. For example, a student who successfully completes Advanced Metal Manufacturing may receive 3 credits at Cayuga Community College for MMT101. (Please note that the availability of offering specific college courses may be updated. Students will be notified at the beginning of the school year exactly what college courses may be offered within the CTE programs.)

**Students who opt to participate in only 1 year of a 2 year program will not receive full academic credit, industry credentials or be eligible for a 4+1 Pathway exam.*

Credential Opportunities: Students have the opportunity to earn credentials in CTE programs. If a student successfully demonstrates the knowledge and/or skills necessary, as determined by business, industry and/or labor associations, then he/she receives a credential. For example, students who demonstrate mastery in welding may be eligible to receive the American Welding Society Entry Level 1 Welder Qualification.

Industry (Technical) Assessments: Industry (or technical) assessments are exams that require students to demonstrate skill and knowledge mastery in their CTE subject matter. These assessments are nationally and/or state recognized and are based on industry standards. For example, eligible Nursing Assistant students will take the New York State Nurse Aid Competency Exam; successful Auto Technology students may be eligible to receive the Automotive Service Excellence (ASE) Education Foundation exam on light maintenance and repair.

Program Supplies, Materials, Assessments Provided: CiTi provides students with safety and industry-specific items needed for participation in the CTE program. For example, Heavy Equipment Repair and Operation students receive work boots, safety glasses, hard hats and outdoor jackets. CiTi also funds all expenses related to students taking industry assessments if taken prior to high school graduation. (Please note that items provided for program participation may change.)

Student Resources

CTE offers all students the opportunity to participate in various clubs. These student clubs offer leadership training, community service projects and social activities.

- Culinary Arts Signature Club
- National Honor Society
- National Technical Honor Society (NTHS)
- SkillsUSA
- Student Safety Committee
- Student Senate
- Student Technology Integration Committee



ADVANCED METAL MANUFACTURING

CAREER OPPORTUNITIES:

Metal Fabricator

CAD Engineer

Welder

Machinist

DID YOU KNOW?

66 NEW CTE PROGRAMS

*have been developed state-wide through
partnerships and guidance from local businesses.*

Data Provided By: Boards of Cooperative Educational Services of New York State and Applied Educational Systems

ADVANCED METAL MANUFACTURING

Program Description: Advanced Metal Manufacturing will introduce students to the skills and training of design, machining, fabricating and welding. Using engineering drawing techniques and CAD-CAM software, students will design projects starting with raw materials such as steel, aluminum and brass. Machine tools and fabricating equipment will then be used to assemble projects.

Program Length: Two years

Industry Alignment: National Institute for Metalworking Skills (NIMS) Standards; Occupational Safety & Health Administration (OSHA) Standards

Integrated Academic

Coursework: Career and Financial Management (1/2 credit); Math (1/2 credit per year)

4+1 Pathway Option: NIMS – Machining Level 1

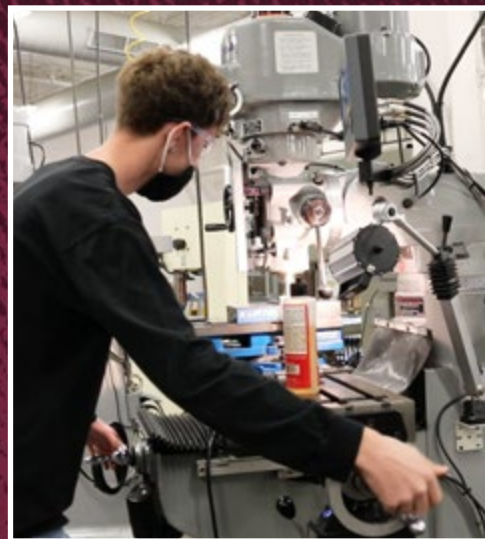
College Credit Opportunities:

Articulation Agreement: Lincoln Technical Institute; Dual Credit: Cayuga Community College: MMT 101 Machine Tools I

Credential Opportunities: NIMS – Machining Level 1 – Measurement, Materials and Safety; Job Planning, Benchwork and Layout; 10-hour OSHA General Industry Safety & Health Credential; Technical Endorsement on Graduation Diploma

Industry Assessments: NIMS – Machining Level 1– Measurement, Materials and Safety; Job Planning, Benchwork and Layout; Certification

Program Supplies, Materials, Assessments Provided: Work boots; safety glasses; 10-hour OSHA training certificate, NIMS Exam



BUILD Your FUTURE
with Career & Technical Education



AUTO BODY REPAIR

CAREER OPPORTUNITIES:

Auto Body
Technician

Painter

Parts Manager

DID YOU KNOW?

**95% OF CTE
STUDENTS
GRADUATE HIGH SCHOOL**
10% higher than the national average

Data Provided By: Boards of Cooperative Educational Services of New York State and Applied Educational Systems

AUTO BODY REPAIR

Program Description: Each damaged vehicle presents a new problem to be solved. Auto body technicians solve these problems by using specialized equipment and tools to straighten frames, remove dents and replace parts. Students will practice procedures that will develop perceptual capabilities and skills to produce high quality auto body repairs.

Program Length: Two years

Industry Alignments:

Automotive Service Excellence (ASE); ASE Education Foundation; Inter-Industry Conference on Auto Collision Repair (ICAR); Occupational Safety & Health Administration (OSHA)

Integrated Academic

Coursework:

Career and Financial Management (1/2 credit); Science (1/2 credit per year)

4+1 Pathway Option: NOCTI: Collision Repair and Refinishing

College Credit Opportunities:

Articulation Agreements: Lincoln Technical Institute; Ohio Technical College; Universal Technical Institute

Credential Opportunities:

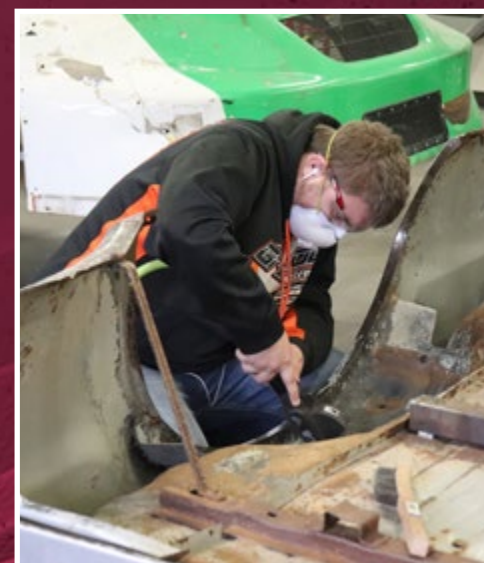
ASE – Time Toward Painting and Refinishing ASE Accreditation and Test Preparation; ASE Education Foundation Entry-Level Certification; 10-hour OSHA General Industry Safety and Health Credential; Technical Endorsement on Graduation Diploma

Industry Assessments: ASE

Education Foundation Entry-Level Painting and Refinishing Certification Exam

Program Supplies, Materials,

Assessments Provided: Work boots; safety glasses; respiratory physical; NOCTI – Collision Repair and Refinishing Technician Exam; 10-hour OSHA Training Certificate; ASE Education Foundation Entry-Level Painting and Refinishing Certification Exam



BUILD Your FUTURE
with Career & Technical Education



AUTO TECHNOLOGY

CAREER OPPORTUNITIES:

Mechanic

Auto Parts
Salesperson

Insurance Adjuster

DID YOU KNOW?

91% **HIGH SCHOOL GRADUATES**
of *who earned 2-3 CTE credits*
ENROLLED IN COLLEGE

Data Provided By: Boards of Cooperative Educational Services of New York State and Applied Educational Systems

AUTO TECHNOLOGY

Program Description: Through the Auto Technology program, students learn the various aspects of vehicle diagnosis, repair and maintenance. The units of study include eight required National Institute for Automotive Service Excellence modules - Engine Performance, Steering/Suspension Systems, Engine repair and Automatic/Manual Transmissions and Transaxles, Electrical/Electronics, Brakes, Heating and Air Conditioning and Tires and Wheels.

Program Length: Two-year program: Auto Tech I is offered in the AM session only (one year); Auto Tech II is offered in the PM session only (one year)

Industry Alignment:

Automotive Service Excellence (ASE); ASE Education Foundation; Occupational Safety and Health Administration (OSHA)

Integrated Academic

Coursework: Career and Financial Management (1/2 credit); Science (1/2 credit per year)

4+1 Pathway Option: ASE Educational Foundation: Maintenance & Light Repair

College Credit Opportunities:

Articulation Agreements: Ohio Technical College; Lincoln Technical Institute; SUNY Canton; SUNY College of Technology at Delhi

Credential Opportunities: ASE Education Foundation Entry-Level Certification Exam - Time Toward ASE Accreditation and Test Preparation; 10-hour Occupational Safety and Health Administration (OSHA) General Industry Safety and Health Credential; Technical Endorsement on Graduation Diploma

Industry Assessments: ASE Education Foundation Entry-Level Certification Exam - Maintenance and Light Repair

Program Supplies, Materials, Assessments Provided:

Work boots; safety glasses; 10-hour OSHA certificate; ASE Education Foundation Entry-Level Certification Exams - Brakes, Steering and Suspension, Electrical/Electronic Systems, Engine Performance, MLR (Maintenance and Light Repair); Engine Repair, Automatic Transmissions/Transaxles, Manual Drive Train and Axles and Heating, Ventilation and Air Conditioning (HVAC)





COMPUTER CODING

CAREER OPPORTUNITIES:

Game Developers

Database
Administrators

Back-End
Developers

DID YOU KNOW?

BETWEEN 2012 AND 2022, THERE WILL BE
50,557,900
JOB OPENINGS *for CTE graduates*

Data Provided By: Boards of Cooperative Educational Services of New York State and Applied Educational Systems

COMPUTER CODING

Program Description: Computer Coding is one of the fastest growing industries in the world today. The Computer Coding program is an introductory class providing students with programming foundations. Students will utilize a variety of computer languages including HTML, CSS, DNA, SQL and Javascript. Course projects will include mobile app development, autonomous robotics, remote server workflow and data queries. There is an emphasis on developing for the web as well as producing data driven applications.

Program Length: Two years

Integrated Academic Coursework:

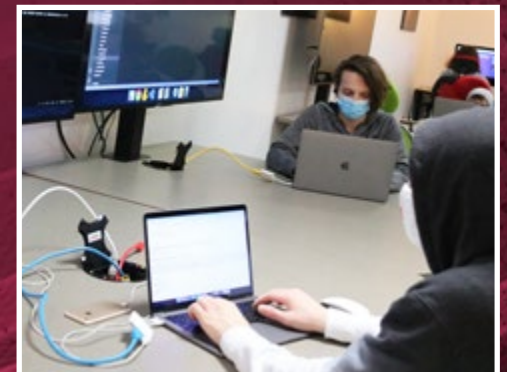
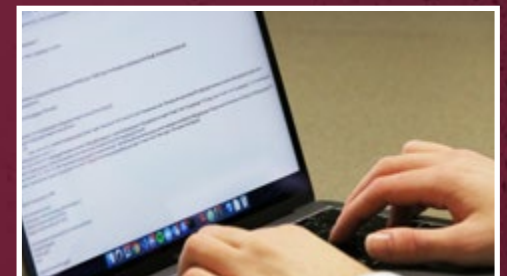
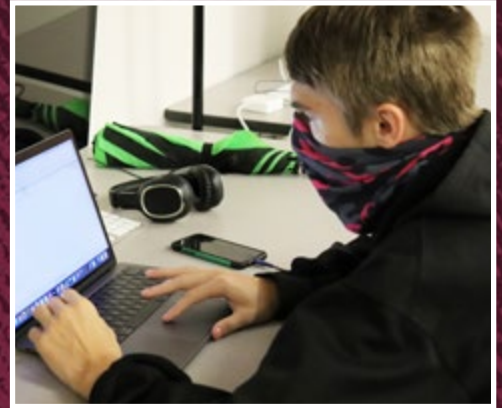
Career & Financial Management (1/2 credit), ELA (1/2 credit per year)

4+1 Pathway Option: Precision Web Development II

College Credit Opportunities:

Articulation Agreements: New England Institute of Technology: GDS110 Introduction to Game Programming, BDS111 HTML & JavaScript or SE111 HTML & JavaScript

Credential Opportunities: HTML/CSS Development



BUILD Your FUTURE
with Career & Technical Education



CONSTRUCTION TECHNOLOGY

CAREER OPPORTUNITIES:

Carpenter

Laborer

Electrician

DID YOU KNOW?
5,407

REPRESENTATIVES FROM BUSINESSES
served on BOCES CTE advisory councils

Data Provided By: Boards of Cooperative Educational Services of New York State and Applied Educational Systems

CONSTRUCTION TECHNOLOGY

Program Description:

Construction Technology provides students with classroom instruction and hands-on experiences in various aspects of the construction industry. Students will gain knowledge and apply it to the following areas: carpentry, electrical, masonry and plumbing. A strong emphasis is placed on safety, career and college readiness, career exploration and construction competencies.

Program Length: Two years

Industry Alignments:

National Center for Construction Education and Research (NCCER); Occupational Safety and Health Administration (OSHA) Construction Industry

Integrated Academic

Coursework: Career and Financial Management (1/2 credit); Math (1/2 credit per year)

4+1 Pathway Option:

NCCER Academic Career Test: Core Introductory Craft Skills

College Credit Opportunities:

Articulation Agreements: SUNY College of Technology at Delhi

Credential Opportunities:

NCCER Core Introductory Craft Skills Certification; 10-hour OSHA Construction Industry Credential; Technical Endorsement on Graduation Diploma

Industry Assessment:

NCCER Academic Career Test: Core Introductory Craft Skills

Program Supplies, Materials,

Assessments Provided: Work boots; safety glasses; 10-hour OSHA training; NCCER Academic Career Test: Core Introductory Craft Skills



BUILD Your FUTURE
with Career & Technical Education



COSMETOLOGY

CAREER OPPORTUNITIES:

Salon Manager

Hairstylist

Nail Care Artist

Aesthetician

DID YOU KNOW?

70% OF CTE STUDENTS

say entering a CTE program helped them
GET BETTER GRADES

Data Provided By: Boards of Cooperative Educational Services of New York State and Applied Educational Systems

COSMETOLOGY

Program Description: The Shear Class Beauty Salon at CiTi offers students the opportunity to gain practical experience and apply classroom theory as they work toward meeting the requirements to take the New York State licensing exam. Students will have the opportunity to participate in competitions, community service activities and internships in a full-service working salon. Students are expected to demonstrate the ability to work independently and with others, as well as have appropriate decision-making skills. The fast-paced environment of cosmetology can lead to a number of career opportunities.

Program Length: Two years (may be eligible to apply for a temporary N.Y. State License after attainment of 1000 hours)

Industry Alignments: New York State Cosmetology Division of Licensing Services Curriculum; New York State Education Department Cosmetology Prioritized Curriculum

Integrated Academic Coursework:

Career and Financial Management (1/2 credit); Science (1/2 credit per year); English (1/2 credit per year)

4+1 Pathway Option: NOCTI – Cosmetology

College Credit Opportunities:

Articulation Agreement: Bryant & Stratton College

Credential Opportunities

for Students: Temporary Cosmetologist License (After the successful completion of 1,000 hours, which may include an additional time commitment outside of regular class hours); Technical Endorsement on Graduation Diploma

Program Supplies, Materials, Assessments Provided: Stylist smock; NOCTI Cosmetology Exam



BUILD Your FUTURE
with Career & Technical Education



CULINARY ARTS

CAREER OPPORTUNITIES:

Sous Chef

Food Critic

Baker Assistant

DID YOU KNOW?

Technical and applied science graduates earn
\$2,000 TO \$11,000
MORE PER YEAR *than those with a bachelor's degree*

Data Provided By: Boards of Cooperative Educational Services of New York State and Applied Educational Systems

CULINARY ARTS

Program Description: Working as a chef, cook or food-preparation worker involves the ability to work as an efficient team member. While applying classroom theory in an industrial kitchen, students will learn food preparation and cooking methods, food-handling techniques and sanitation procedures. This course provides students with a solid foundation for further career training programs.

Program Length: Two years

Industry Alignments: ProStart; ServSafe; New York State Restaurant Association Education Foundation; National Restaurant Association Education Foundation

4+1 Pathway: National Restaurant Association Educational Foundation: ProStart Level 1 and 2
Qualters Practical Assessment

Integrated Academic Coursework:

Career and Financial Management (1/2 credit); Science (1/2 credit per year)

College Credit Opportunities:
Dual Credit: Cayuga Community College CULA 100 Food Safety and Sanitation; CULA 101 Culinary Methods and Techniques 1;

CULA 102 Culinary Methods and Techniques II; BIOL 209 Basic Nutrition; Articulation Agreements: SUNY Cobleskill; Schenectady County Community College; Bryant & Stratton College; SUNY Morrisville; Culinary Institute of America; SUNY Delhi; Tompkins Cortland Community College; Niagara Falls Culinary Institute; The Culinary Institute of New York at Monroe College; All ProStart articulations locations

Credential Opportunities:

ProStart – Level 1 and 2 ProStart Certificate of Achievement; ServSafe Food Handler Certification; ServSafe Manager Certification; Technical Endorsement on Graduation Diploma

Industry Assessments: ProStart – Foundations of Restaurant Management and Culinary Arts; Qualters Practical Exam

Program Supplies, Materials, Assessments Provided: Chef hats; aprons; uniforms; shoes; ServSafe Certifications; ProStart; NOCTI – Prep Cook Performance Assessment Level 1; Qualters Food Handler Practical Exam (Level 1) and Management (Level 2)





DIGITAL MEDIA TECHNOLOGY

CAREER OPPORTUNITIES:

Graphic Designer

Animator

Videographer

DID YOU KNOW?

38,442 STUDENTS DEVELOPED

college and career-ready skills through **CTE PROGRAMS**

Data Provided By: Boards of Cooperative Educational Services of New York State and Applied Educational Systems

DIGITAL MEDIA TECHNOLOGY

Program Description: This program combines the creative elements of fine arts with digital technologies. Students use the latest industry hardware and software to complete projects in multimedia (including video production, audio editing and special effects), desktop publishing and digital photography. Digital Media Technology lays the foundation for exciting careers in web development, public relations, graphic design, animation, gaming and programming.

Program Length: Two year

Industry Alignments:

National Educational Technology Standards; International Society for Technology in Education Standards; Internet and Computing Core Standards; Certification (IC3) Digital Literacy Standards

Integrated Academic

Coursework: Career and Financial Management (1/2 credit); ELA (1/2 credit each year)

4+1 Pathway Option: NOCTI: Advertising Design

College Credit Opportunities:

Dual Credit: Cayuga Community College: ART 252 Photoshop; ART 215 Computer Graphics/Illustrator; Articulation Agreements: Bryant & Stratton College, Mohawk Valley Community College

Credential Opportunities:

Adobe Creative Cloud: Photoshop, Illustrator, InDesign, Muse, Animate, After Effects, Premiere Pro; Technical Endorsement on Graduation Diploma

Materials, Assessments

Provided: NOCTI Advertising and Design Exam



BUILD Your FUTURE
with Career & Technical Education



EARLY CHILDHOOD EDUCATION

CAREER OPPORTUNITIES:

Elementary Teacher

Daycare Provider

Teacher's Aide

DID YOU KNOW?

78% OF CTE GRADUATES

enroll in post-secondary
EDUCATION FULL-TIME

Data Provided By: Boards of Cooperative Educational Services of New York State and Applied Educational Systems

EARLY CHILDHOOD EDUCATION

Program Description: The Early Childhood Education program is designed to teach students the aspects of teaching and working with young children, from birth through elementary age. Students will explore career pathways and develop the characteristics of successful teachers and childcare providers through practicums. Applying theoretical concepts to real-life situations, students are able to take what they have learned in the classroom and apply it to their rotation experiences where they learn how to meet the developmental needs and interests of young children in elementary school and daycare settings.

Program Length: Two years

Industry Alignments: Council for Professional Recognition – Child Development Associate Competency Standards; American Red Cross: First Aid, Cardiopulmonary Resuscitation (CPR) and Automated External Defibrillator (AED) - Adult, Child and Infant Standards

Integrated Academic Coursework:

Career and Financial Management (1/2 credit); English (1/2 credit per year)

4+1 Pathway Option: NOCTI Early Childhood and Care – Basic

College Credit Opportunities: Dual Credit: Cayuga Community College: BIO 209 Basic Nutrition (1st year students), CAY 101 Foundations for College Success (2nd year students); Articulation Agreements: SUNY Herkimer; SUNY Cobleskill

Credential Opportunities: Child Development Associate (CDA); NYS Teaching Assistant Certificate – Level I; American Red Cross: First Aid, CPR and AED Certifications; Technical Endorsement on Graduation Diploma

Industry Assessment: Child Development Associate, NYS Teaching Assistant

Program Supplies, Materials, Assessments Provided: Polo shirts; NOCTI – Early Childhood Care and Education (Basic and Advanced Exam); American Red Cross – First Aid, CPR, AED (Child and Infant Certifications); Child Development Associate (CDA) exam (must be eligible to test after completing two years of instruction; attaining the minimum hours of instruction and hours working with children); NYS Teaching Assistant Exam (must be eligible to test after completing two years of instruction and completed all workshops); Fingerprint Clearance for Teaching Assistant Certificate.





HEAVY EQUIPMENT REPAIR AND OPERATION

CAREER OPPORTUNITIES:

Excavator Operator

Heavy Equipment
Mechanic

Construction Manager

DID YOU KNOW?

82% OF CTE STUDENTS

say they're satisfied with
CAREER OPPORTUNITIES

Data Provided By: Boards of Cooperative Educational Services of New York State and Applied Educational Systems

HEAVY EQUIPMENT REPAIR AND OPERATION

Program Description: Students in the Heavy Equipment Repair and Operation (HERO) program will learn how to service, repair and operate various types of excavation equipment.

Program Length: Two years

Industry Alignments: National Center for Construction Education & Research (NCCER); Occupational Safety and Health Administration (OSHA)

Integrated Academic

Coursework: Career and Financial Management (1/2 credit; Science (1/2 credit per year)

4+1 Pathway Option: NCCER: Academic Career Test: Core

College Credit Opportunities:

Articulation Agreements: Lincoln Technical Institute; Ohio Technical College; SUNY Cobleskill

Credential Opportunities for Students: NCCER Core and Level 1 – Heavy Equipment Operations Credential; 10-hour OSHA General Industry Safety and Health credential; Technical Endorsement on Graduation Diploma

Industry Assessment: NCCER – National Construction Career Test - Academic Core and Level 1 – Heavy Equipment Operations

Program Supplies, Materials, Assessments Provided: Jacket; hard hat/liner; safety glasses; work boots; 10-hour OSHA credential; National Construction Career Test Level 1 Heavy Equipment Operator Exam





INDUSTRIAL ELECTRICAL TECHNOLOGIES

CAREER OPPORTUNITIES:

Electrician

Lineman

Transmission
Technician

DID YOU KNOW?

STUDENTS ENROLLING IN POST-SECONDARY

*CTE courses
are eligible for*

FEDERAL FINANCIAL AID

Data Provided By: Boards of Cooperative Educational Services of New York State and Applied Educational Systems

INDUSTRIAL ELECTRICAL TECHNOLOGIES

Program Description: This program provides introduction level exposure to fundamental knowledge and skills associated with the industrial electrical trades. Classroom instruction in electrical theory and fundamentals as well as shop experiences will expose students to real life requirements and expectations of the trade.

Students will learn fundamentals of hand tool, power tool and test equipment use in an environment where safety, teamwork and accountability are stressed. Labs will provide hands-on experience and demonstrations applicable to industrial electrical work settings.

Industry partners will provide students with project-based learning, facility tours, job shadowing, career development and the possibility of summer employment.

Program Length: Two years, PM only

Integrated Academic Coursework: Math (1/2 credit per year); Career & Financial Management (1/2 credit)

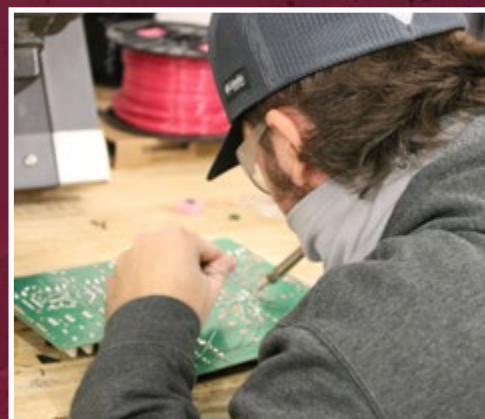
4+1 Pathway Option: NCCER Core Introductory Craft Skills

College Credit Opportunities: Articulation Agreements: SUNY College of Technology at Delhi; Lincoln Technical Institute

Credential Opportunities: 10-Hour OSHA General Industry Safety and Health Credential; NCCER Core Certification

Industry Assessment: NCCER Academic Core

Program Supplies and Materials: Work boots, 10-Hour OSHA Credential, Safety Glasses



BUILD Your FUTURE
with Career & Technical Education



NEW VISION ALLIED HEALTH

CAREER OPPORTUNITIES:

Nurse

Doctor

Family Health
Education

DID YOU KNOW?
11 OF THE 20
FASTEST-GROWING JOBS
are in the healthcare field

Data Provided By: Boards of Cooperative Educational Services of New York State and Applied Educational Systems

NEW VISION ALLIED HEALTH

Program Description: The New Vision Allied Health program is designed for high school seniors interested in pursuing a career in healthcare. Students will participate in classroom instruction and career-related experiences observed during clinical rotations in settings such as local health sites, health centers and private practices ranging from primary care to dental care. The classroom setting is held on the SUNY Oswego campus, giving students a first-hand experience as college students.

Program Length: One year (seniors only)

Industry Alignment:

American Red Cross - First Aid: Cardiopulmonary Resuscitation (CPR) and Automated External Defibrillator (AED) - Adult, Child and Infant Standards

Integrated Academic Coursework:

Participation in Government (1/2 credit); Economics (1/2 credit); Health (1/2 credit); English 12 (1 credit)

4+1 Pathway Option: No pathway exam available

College Credit Opportunities: SUNY Oswego English 102; English 150; Psychology 100; GST 101 Career Awareness

Credential Opportunities: American Red Cross - First Aid, CPR and AED Adult Certifications

Program Supplies, Materials, Assessments Provided: Scrubs, American Red Cross - First Aid, CPR and AED Certifications; Clinical Background Clearance Fee

Additional Program Notes: The admission process requires an application, recommendations, a writing sample and an interview.

Candidate Criteria

- Be in grade 12;
- Have achieved an attendance rate of 90 percent or better;
- Possess an 85 percent (3.0) or better overall average;
- Be willing to adhere to school and work site codes of conduct;
- Have a focused interest; and
- Students must submit medical history forms prior to being placed in rotation sites.





NEW VISION SPECIALIZED CAREERS

CAREER OPPORTUNITIES:

Engineer

Veterinarian

Psychologist

DID YOU KNOW?

1,364 STUDENTS
WORKED
SIDE-BY-SIDE
WITH INDUSTRY PROFESSIONALS
in honors-level career courses through BOCES New Vision programs

Data Provided By: Boards of Cooperative Educational Services of New York State and Applied Educational Systems

NEW VISION SPECIALIZED CAREERS

Program Description: The New Vision Specialized Careers program is designed for high school seniors who have a strong interest in pursuing a specific career. Students will participate in classroom instruction, along with real- life career related experiences observed during rotations that are specifically tailored to their career interests (ex. event planning, business administration, vet tech, etc.) These rotation sites will give students an overview of typical occupational experiences. The classroom setting is held on the SUNY Oswego campus, giving students a firsthand experience as college students. Admission to this program is granted through an application and interview process.

Program Length: One year (seniors only)

Industry Alignment:

American Red Cross: First Aid, Cardiopulmonary Resuscitation (CPR) and Automated External Defibrillator (AED) - Adult, Child and Infant Standards

Integrated Academic Coursework:

Participation in Government (1/2 credit); Economics (1/2 credit); English 12 (1 credit)

4+1 Pathway Option: No pathway exam available

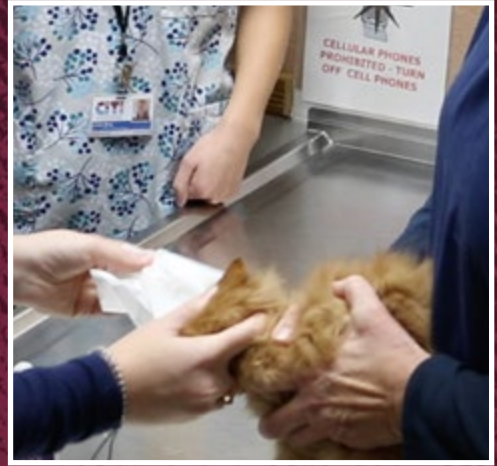
College Credit Opportunities: SUNY Oswego English 102; English 150; Psychology 100; GST 101 Career Awareness

Credential Opportunities: American Red Cross - First Aid, CPR and AED Adult Certifications

Additional Program Notes: The admission process requires an application, recommendations, a writing sample and an interview.

Candidate Criteria

- Be in grade 12 planning to graduate the same year enrolled in New Vision program;
- Have achieved an attendance rate of 90 percent or better;
- Possess an 85 percent (3.0) or better overall average;
- Be willing to adhere to school and work site codes of conduct
- Have a focused career interest
- Students may be required to submit medical history forms prior to being placed in rotation sites.





NURSING ASSISTANT

CAREER OPPORTUNITIES:

Nursing Assistant

Group Home
Therapy Aide

Healthcare
Advocate

DID YOU KNOW?

66 NEW CTE PROGRAMS

*have been developed state-wide through
partnerships and guidance from local businesses.*

Data Provided By: Boards of Cooperative Educational Services of New York State and Applied Educational Systems

NURSING ASSISTANT

Program Description: The Nursing Assistant program offers an introduction into the healthcare field with an emphasis on entry-level employment as a nursing assistant and/or advanced careers through continued education. In this program, students will be provided instruction through classroom theory, lab and clinical skills in preparation for the New York State Nurse Aide Certification exam. Nursing assistant skills will be demonstrated and practiced on manikins and peers in the nursing lab and at clinical rotations.

Students will participate in supervised clinical rotations at local facilities by providing hands-on care to residents/patients.

Program Length: Two years (may be eligible for certification after second year)

Industry Alignments: NYS Department of Health Nurse Assistant/Aide; NYS Education Department Health Core Curriculum; American Red Cross - First Aid, CPR, and AED - Adult, Child and Infant Standards

Integrated Academic Coursework:

Career and Financial Management (1/2 credit); Science (1 credit per year); Health (1/2 credit); English (1/2 credit per year)

4+1 Pathway Option: New York State Nurse Aide Competency Exam

College Credit Opportunities: Dual Credit: Cayuga Community College: CHEM 101 Introduction to Chemistry (2nd year students); Articulation Agreements: Bryant & Stratton College

Credential Opportunities: New York State Department of Health - Nurse Aide Certification; American Red Cross - First Aid, CPR and AED (Adult, Child and Infant Certifications); New York State Department of Health Infection Control Certification; Infection Control Certification; Technical Endorsement on Graduation Diploma

Industry Assessments: New York State Nurse Aide Competency Exam

Program Supplies, Materials, Assessments Provided: Scrubs; Shoes; American Red Cross - First Aid, CPR, AED (Adult, Child and Infant Certifications); New York State Nurse Aide Competency Exam





PUBLIC SAFETY AND JUSTICE

CAREER OPPORTUNITIES:

Firefighter

State Trooper

Paramedic

DID YOU KNOW?

27% OF PEOPLE
— with an —
associate's degree
— or less —

**OUT-EARN THOSE WITH
A BACHELOR'S DEGREE**

Data Provided By: Boards of Cooperative Educational Services of New York State and Applied Educational Systems

PUBLIC SAFETY AND JUSTICE

Program Description: Students enrolled in the Public Safety and Justice program will have the opportunity to explore law enforcement, security, corrections, emergency management and response and firefighting careers. Many hands-on learning experiences will provide students opportunities to learn about evidence gathering, fingerprinting, fire control, emergency response techniques and much more.

Program Length: Two years

Industry Alignments: New York State Division of Criminal Justice Services – Security Guard Training; New York State Office of Homeland Security – Training Guidelines; Department of State – New York State Security Guard Curriculum; New York State Department of Health – Emergency Medical Technician Curriculum; American Red Cross – First Aid, Cardiopulmonary Resuscitation and Automated External Defibrillator (Adult, Child and Infant Standards); New York State Academy of Fire Science Recruit Firefighter Training Program

Integrated Academic Coursework:

Career and Financial Management (1/2 credit); Physical Education (1/2 credit per year); Science (1/2 credit per year); English (1/2 credit per year)

4+1 Pathway Option: NOCTI: Criminal Justice and Protective Services Exam

College Credit Opportunities: Bryant & Stratton College; SUNY College of Technology at Delhi

Credential Opportunities: American Red Cross – First Aid, CPR and AED (Adult, Child and Infant Certifications); Technical Endorsement on Graduation Diploma

Program Supplies, Materials, Assessments Provided: Dress Uniform, boots, NOCTI – Criminal Justice and Protective Services Exams



BUILD Your FUTURE
with Career & Technical Education



WELDING

CAREER OPPORTUNITIES:

ARC/MIG/TIG
Welder

Metal Fabricator

Welding Inspector

DID YOU KNOW?

Within 1 year of graduation,

more than **1/3** **OF CTE**
STUDENTS
were employed

Data Provided By: Boards of Cooperative Educational Services of New York State and Applied Educational Systems

WELDING

Program Description: The Welding Technology program is a two-year program designed to help students gain the basic welding, fabricating, math and problem solving skills needed to qualify for entry-level employment or apprenticeship. Students work to complete the American Welding Society Entry Level Welder Qualification. Students will build a portfolio of projects and weld tests that will prepare them for success in a variety of employment settings.

Program Length: Two years (may be eligible for certification after second year)

Program Industry Alignments: American Welding Society (AWS); Occupational Safety & Health Administration (OSHA)

Integrated Academic Coursework:

Career and Financial Management (1/2 credit) Math (1/2 credit per year) Science (1/2 credit per year)

4+1 Pathway Option: AWS – Level 1 (Entry Welder)

College Credit Opportunities:

Articulation Agreements: Lincoln Technical Institute; Ohio Technical College; SUNY College of Technology at Delhi

Credential Opportunities:

AWS – Entry Level Welder Qualification; 10-hour OSHA Construction Industry Safety and Health Credential; NCCER Core and Welding Level 1 and Level 2 Credentials; Technical Endorsement on Graduation Diploma

Industry Assessments: AWS – Level 1 (Entry Welder); NCCER Core and Welding Level 1

Program Supplies, Materials, Assessments Provided: Work boots, safety glasses, work gloves, welding jacket; 10-hour OSHA training certificate; NCCER certification assessments; AWS Entry Welder Exams



BUILD Your FUTURE
with Career & Technical Education

NOTES

This image shows a single sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

NOTES

This image shows a single sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

NOTES

This image shows a single sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

BUILD *Your* FUTURE
with Career & Technical Education



**179 COUNTY ROUTE 64
MEXICO, NY 13114**

315.963.4251 • WWW.CITIBOCES.ORG/CTE

