

Program Guide 2024-2025

ONEIDA-HERKIMER-MADISON BOCES | CAREER AND TECHNICAL EDUCATION CENTER





Table of Contents



ARIS & HUIVIAINITIES	
Advertising Design/Multimedia Productions	6
ENGINEERING/TECHNOLOGIES TRADE AND TECHNICAL	
Auto Body Repair	9
Automotive Technology (NATEF)	.10
Construction Trades	.11
Electricity/Mechatronics	.12
Emerging Technologies & Cyber Security	.13
MiTech (Modules of Integrated Technologies)	.14
Outdoor Power/Recreational Equipment Technology	15
Pathways in Technology Early College High School (P-TECH)	.16
Welding	17
HEALTH SERVICES Nursing Assistant	.19
HUMAN & PUBLIC SERVICES	
Cosmetology	21
Criminal Justice	22
Culinary Arts	23
Early Childhood Education	24
NATURAL & AGRICULTURAL SCIENCES	
Animal Science	.27
Companyation	20

NEW VISIONS	
Business Management	31
Communications	32
Education	33
Engineering Technology	34
Health Professions	35
Legal Professions	36
Veterinary Science	37
ALTERNATIVE CREDIT BEARING PROGRAMS	
Food Service Occupations	39
Multi-Occupations	40
Trades Exploration	41
School to Career Programs	42
Work Experience Programs	44
CTE Program Credits	45
Clubs & Activities	46
Scholarships & Awards	47



Career and Technical Education Center programs prepare students for high wage, high demand careers and postsecondary education through the development of technical and transferable skills. Students enroll for two years in most programs to increase their college and employment potential after high school. However, students do have the option of enrolling in a program for one year.

Students attend a half day in their Career and Technical Education Center program and a half day at their home school. Working with state-of-the-art equipment, students apply theory to a wide range of real-life work assignments in the school's shops and laboratories. We emphasize a positive mindset, employability skills and career research to prepare students for college and career readiness.

For more information, contact your school counselor, call us at **315.793.8666** or visit our website at **www.oneida-boces. org/ctec** to take a virtual tour and hear student testimonials regarding our outstanding programs!

What can the Career & Technical Education Center offer you?

Businesses today need trained and skilled employees. Universities require students to be educationally prepared. The need for students who are college and career ready is so great that businesses and educational institutions have taken this message to schools everywhere in order to develop graduates with appropriate work skills and knowledge. CTE students follow career pathways linking high school learning with college degrees, industry recognized certifications and connections between what is learned in the classroom and expectations in the employment field.



In 1948, the Oneida-Herkimer-Madison BOCES began its mission to educate students in various pathways for high school graduation. In 2023, we celebrated 75 years of preparing students to become technology leaders of the future. We have maintained active partnerships with the business community through our Advisory Council and program consultant committees. Our educational staff, area businesses, students and parents work together as a team to provide a meaningful educational experience for all of our students. This career and college readiness preparation includes on-the-job internship experiences, program instruction aligned to college curricula and college credit integration opportunities for students in traditional programs who meet select criteria.

Every year we conduct a student survey to assess where our students are advancing in their future. Historically, more than 95% of graduates have reported successful outcomes including gainful employment in their program field or post-secondary studies at a variety of technical schools, colleges and universities.

In addition to the career and technical programs and integrated academic courses that OHM BOCES offers, we also provide New Visions courses that allow seniors to go on-site at participating businesses to learn about the field. Additionally, we offer MiTech, an exploratory program to expose freshmen and sophomores to the variety of traditional courses we offer. More information about these programs can be found in this publication.

If you are interested in a challenging and hands-on education, we invite you to look through these pages to learn how a career and technical education can be the key to your future.

Mike Hoover

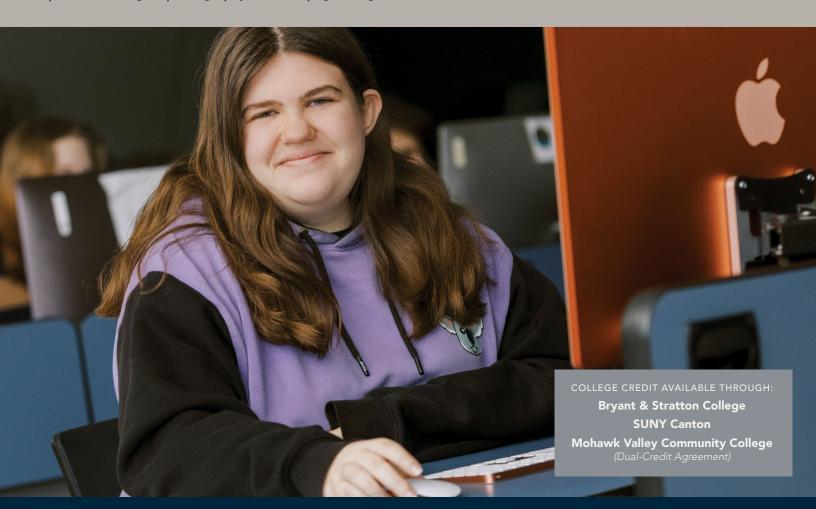


This program is designed with a two-year approach in mind. First year students in the Advertising Design/Multimedia Productions program are taught principles and theories of design and marketing, while second year students focus on independent design projects. Offering an overview of the graphic arts fields, students come away with a well-rounded understanding of the field as well as an example of their applied knowledge through the culminating independent projects.

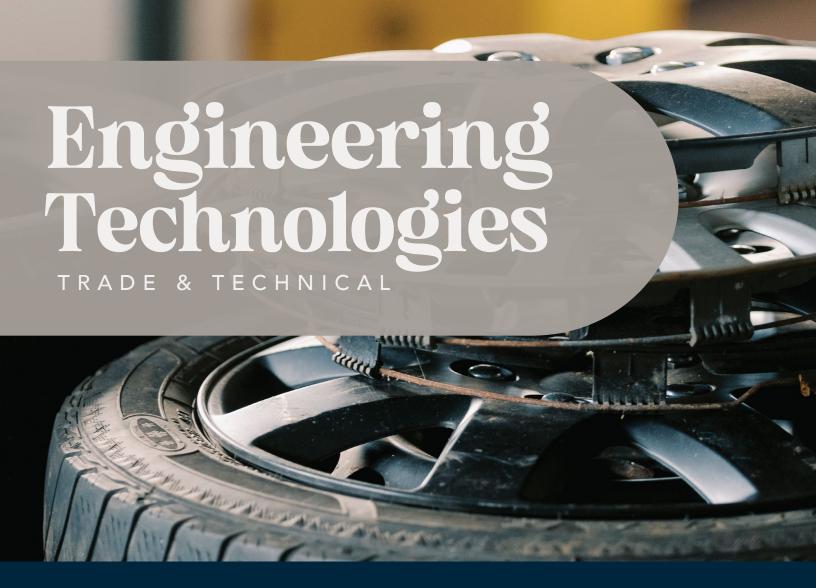
Advertising Design & Multimedia Productions

This is a two-year course offering an overview of graphic arts fields including advertising, design, illustration, logo and symbol design, computerized graphic design, basic web page design and typography. First-year students learn design principles, advertising and marketing theories, basic computer operations and introduction to design software packages.

Second year students create independent design projects in areas of interest including audio production, video production, digital photography and web page design.



"The Advertising Design class has given me the chance to display my creativity. In particular, I have enjoyed learning about videography and photography in the class."



With a heavy focus on technical skills, this career cluster allows students exposure to the "ins and outs" of several trades and STEM fields. Program options include Auto Body Repair, Automotive Technology, Construction Trades, Electricity, Emerging Technologies & Cyber Security, Outdoor Power/Recreational Equipment Technology and Welding. Students are taught by experienced professionals in the field while immersed in hands-on experience. Proper use of tools, understanding codes and exposure to emerging technologies are just some of the ways in which students are prepared for success in the fields.

Also included in this career cluster is MiTech, which allows ninth and tenth grade students the opportunity to explore the technical trades field, and Pathways in Technology Early College High School (P-TECH) which combines academic rigor and career focus to allow graduates to earn a high school diploma and an accredited associate degree.

Auto Body Repair

The Auto Body program is designed to prepare students to become entry-level technicians. First-year students do plastic repair, smell dent repair, re-finishing, and introduction to welding. When students return for their second year, they apply the first-year lessons on customers' vehicles in a state-of-the-art lab, which includes a paint booth and frame machine. These lessons, learned over the scope of the two-year program, will prepare students to enter the auto body field.

COLLEGE CREDIT AVAILABLE THROUGH:

Alfred State

SUNY Canton

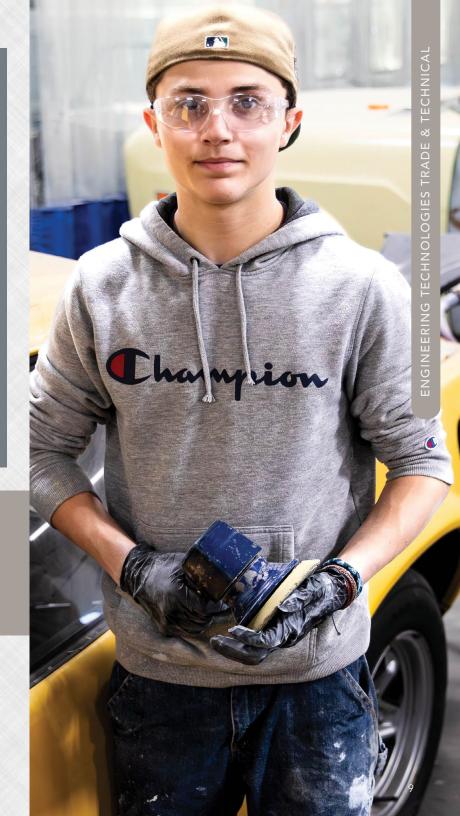
SUNY Morrisville

"The Auto Body Repair program is a perfect fit for my interests. I enjoy working on cars and want to learn more about them. I plan to work on cars after high school."

Andrew Cyr

New Hartford Central School District

CTE programs are designed to fill the shortage of 6.5 million skilled workers in the United States, giving students the tangible skills they can immediately use in the workforce.



Automotive Technology (NATEF)

Students in Automotive Technology learn to diagnose, service and repair many different systems in today's vehicles. Students also learn about computerized engine controls, emission controls, wheel alignment and how to perform New York State vehicle inspections.

This NATEF (National Automotive Technician Education Foundation) certified program provides an excellent foundation to enter an automotive college program or the workforce.



Construction Trades

The Construction Trades program teaches basic skills in residential construction as students gain experience in foundation work, rough framing, roofing, siding, drywall, solar panel installation and our newly expanded modules of plumbing and masonry. Students learn how to use and maintain trade tools properly and safely. In addition, they receive instruction in building codes, blueprint reading and the application of trade math. A great emphasis is placed on hands-on learning through various projects on and off campus.

"Construction is becoming one of my hobbies.

I enjoy the Construction Trades program
because I get to meet new people and learn
new things that I haven't experienced before."

Cody Coon, Waterville Central School District

COLLEGE CREDIT AVAILABLE THROUGH:

Bryant & Stratton College
Hilbert College
SUNY Canton
SUNY Morrisville



Electricity/Mechatronics

Electricians install, maintain and troubleshoot electrical systems and equipment in homes, offices, institutions and industrial plants. Students learn residential, light commercial and industrial wiring through a variety of hands-on activities and projects. During the second year of the program, students will also receive instruction in solar photovoltaics using state-of-the-art equipment.

Mechatronics is a pathway students may take in their second year of Electricity. In partnership with MVCC, students learn mechanics, electronics, motor control systems and automation which drive the design, operation and maintenance of all modern complex machinery. During this learning experience, students will attend MVCC, free of charge, and earn college credit that leads to a direct pathway to entry level positions in advanced manufacturing.



"The Career and Technical Education Center offers unique opportunities with hands-on learning to prepare you for a career after high school."

Matthew Sanchez, New Hartford Central School District

Emerging Technologies & Cyber Security

This two-year course teaches computer repair and basic networking fundamentals during the first year. This includes hardware and software installation, PC hardware devices and end user support, problem solving, troubleshooting, telecommunications protocols and network support.

Second year students will learn advanced networking technologies and gain exposure to the field of information system security including issues faced by homes and businesses, the types of damage they may cause and prudent security measures to counteract them.

Students will learn basic terminology involved in cyber security, describe various threats and identify potential security technologies to combat these threats.

With today's emerging technologies, all types of businesses and industries face information system security issues, making knowledge of computer security a high demand area. With further training and experience, students completing this program have the opportunity to take certification exams in A+, N+ and Security+, thereby greatly increasing their employment potential.

COLLEGE CREDIT AVAILABLE THROUGH:

SUNY Canton

SUNY Morrisville

"I like the hands-on learning in the Emerging Technologies and Cyber Security program and I've always been interested in computers. In this program, you learn a lot of new things."

Kristine Plows, Brookfield Central School District



MiTech

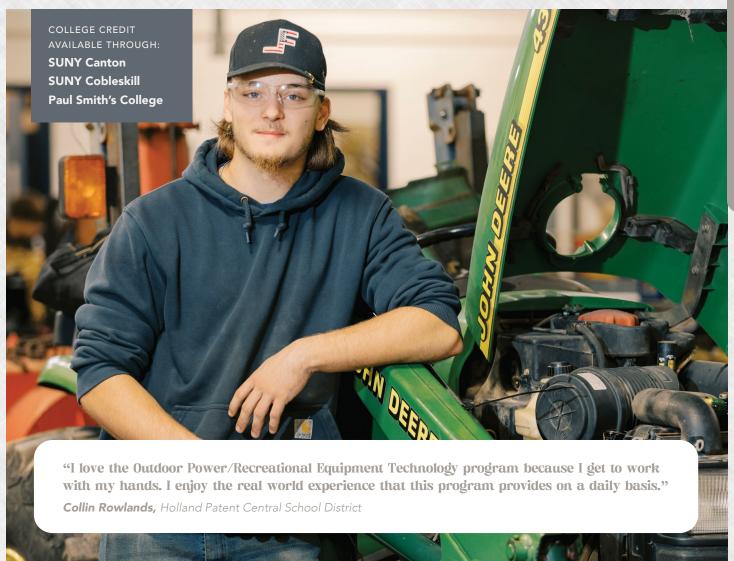
(Modules of Integrated Technologies)

MiTech (Modules of Integrated Technologies) is a career exploration and skills development program for 9th or 10th grade students with academic needs who are preparing to enter traditional career and technical education programs. Students will engage in real-life tasks allowing them to apply knowledge and information, accrue work-based learning hours, develop skills in craftsmanship, build self-esteem, and develop good work habits and work ethic.

Students may receive English, math, and two career and technical education credits. Program modules may include auto body repair, automotive technology, carpentry, culinary, horticulture, small engine repair and welding. Students will also have the opportunity to visit additional CTE courses to help them identify other areas of potential interest.

Outdoor Power/Recreational Equipment Technology

In the Outdoor Power/Recreational Equipment Technology program, students learn to repair, rebuild and tune up several basic types of engines. These engines can be found on equipment such as snow blowers, lawn mowers, rototillers, farm tractors, construction equipment, motorcycles, jet skis and snowmobiles. Students also learn metal skills, including electric arc, MIG and oxyacetylene welding.



P-TECH

(Pathways in Technology Early College High School)

Pathways in Technology Early College High School (P-TECH) is a program offering an integrated high school and college curriculum focusing on science, technology, engineering, art and mathematics (STEAM), while also providing workplace skills including leadership, communication and problem solving.

This program will enroll freshmen in a flexible (four, five, or six-year) program combining academic rigor and career focus with graduates earning a high school diploma and an accredited associate degree. Students will experience internships with P-TECH business and industry partners and, upon graduation, will be regarded as viable candidates for employment with these partnering agencies.

Enrollment for this program is conducted through an application process in collaboration with the districts we serve. Students have the opportunity to fulfill Regents diploma requirements (22 high school credits) and earn 64 college credits in one of the ten P-TECH associate degree pathways offered.





"The BOCES Welding program is a great experience. Unions like to see that you have completed the program before entering the field."

Mackenzie Rose Kinville, New York Mills Union Free School District

SURVEY RESULTS SHOW THAT 75 PERCENT OF OUR GRADUATES CONTINUE THEIR TRAINING AT POST-SECONDARY INSTITUTIONS.



Designed to prepare students to become Nursing Assistants, the Health Services career cluster teaches students basic skills in the area of personal needs and patient comfort. Students learn applied theory in the classroom and clinical laboratory experience in role-playing situations. The program culminates with a six-week clinical experience.

Nursing Assistant

This course teaches students basic skills in the area of personal needs and develops the specialized skills required for patient comfort. After learning applied theory in the classroom, students practice nursing skills in the clinical laboratory in actual role-playing situations. Students then transfer their knowledge to the work environment, where they spend six weeks (100 clinical hours) gaining valuable experience. Once students complete the class, they are eligible to take the written and performance tests offered by the New York State Department of Health to become a Certified Nursing Assistant.

COLLEGE CREDIT AVAILABLE THROUGH:

Bryant & Stratton College

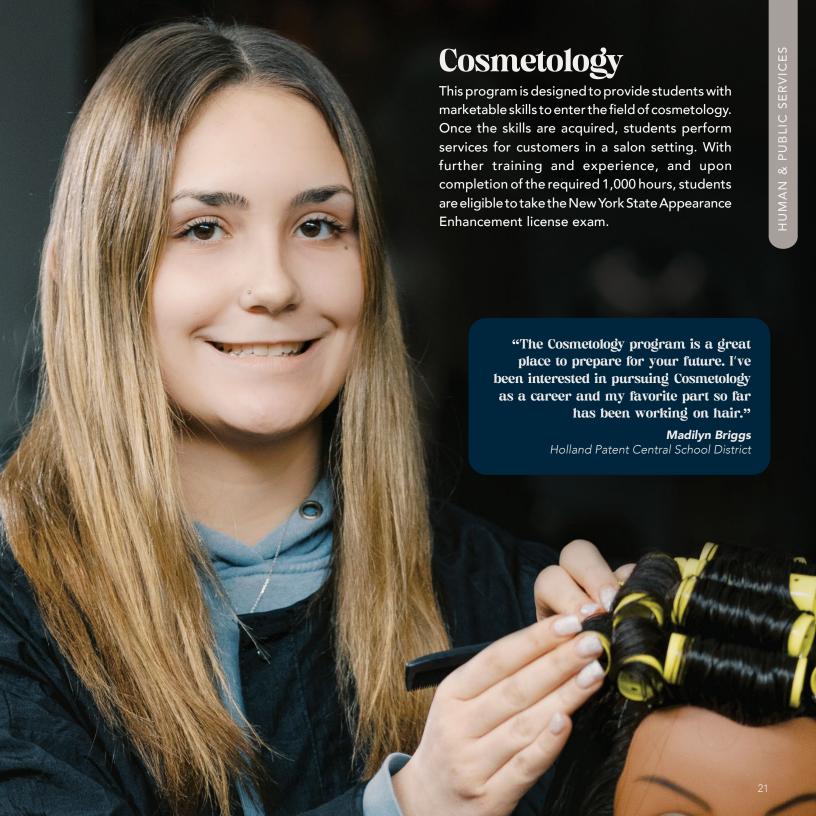


"I love going out to clinical settings and experiencing real scenarios in the medical field. It's important to me to have as much hands-on experience as possible before entering the workforce as a medical professional."

Dakota Deveans, Clinton Central School District



Designed to prepare students with both marketable and practical skills, this career cluster offers them the opportunity to study Early Childhood Education, Cosmetology, Criminal Justice or Culinary Arts. After a combination of classroom learning and hands-on experience in the community, students will be ready to take licensing exams, continue working towards their college degree with credit under their belts or enter the workforce and begin their journey working to serve the public.



Criminal Justice

The two-year Criminal Justice program covers nearly all facets of public safety. The first year includes topics such as New York state penal, vehicle and traffic laws; criminal procedure law; accident investigation and reconstruction; incident command; fire fighting; criminal investigation; police patrol tactics; forensics; ballistics; cyber security; terrorism; firearm safety; and more.

The second year introduces seniors to the popular field of forensic science. Topics include crime scene investigation; anthropology; hair, fiber, soil and blood spatter analysis; and practical, hands-on activities. This program is designed to better educate and prepare students to be successful in an increasingly technical and competitive career.







Early Childhood Education

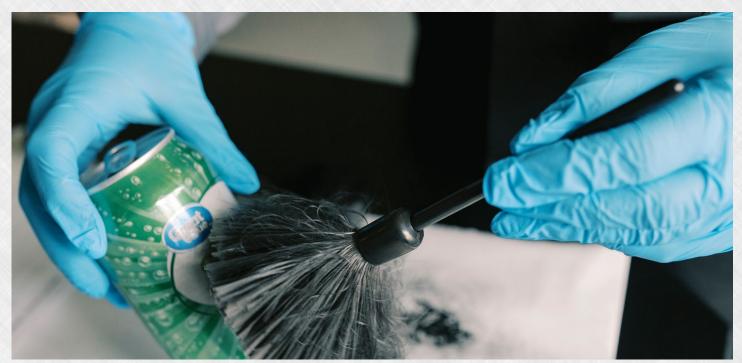
Early Childhood Education students engage in a variety of learning opportunities, including dual credit courses through Mohawk Valley Community College, that lead to practical experience with daycare, preschool, and elementary classrooms. Students will operate a laboratory nursery school under the direction of the program's teacher at the Career and Technical Education Center. Students gain practical experience working in internships at local elementary schools and daycare centers.

COLLEGE CREDIT AVAILABLE THROUGH:
SUNY Canton
Mohawk Valley Community College
(Dual-Credit Agreement)

"I enjoy the opportunities, such as internships, I get to have through the Early Childhood Education program. I get to both learn and practice teaching. The real life and real world experiences are very important to me."

Ava WilliamsSauquoit Valley Central School District







With a focus on the care and management of animals and the environment, this career cluster offers students the opportunity to study Animal Science or Conservation. Students are exposed to job sites and the variety of occupations available to them. With the opportunity for hands-on experience and career field exposure, students will begin to acquire the knowledge and technical skills necessary for success.

Animal Science

Students in the Animal Science program study animal behavior, safe handling and restraint, anatomy and physiology, small animal care and management, health and disease, nomenclature and veterinary terminology. Students will also visit sites to view first-hand how animal science applies to a variety of jobs and occupations.

COLLEGE CREDIT AVAILABLE THROUGH **SUNY Cobleskill**





Conservation

The Conservation program emphasizes the skills and knowledge required for success in the many conservation-related careers. The course is a blend of classroom instruction and hands-on outdoor learning, with the importance of a favorable work ethic stressed. Students acquire skills in forestry, fish and wildlife management; heavy equipment operation; timber harvesting; chain saw operation and maintenance; tree climbing; map and compass; GPS; surveying and more. In our greenhouse, students become skilled in hydroponics, aquaculture and plant propagation.

"I chose the Conservation program because I enjoy going outdoors. If you like getting out of the classroom and being in nature, this is definitely the class for you."

> **Aidan Pawelek** Whitesboro Central School District

COLLEGE CREDIT AVAILABLE THROUGH:

Bryant & Stratton College Paul Smith's College



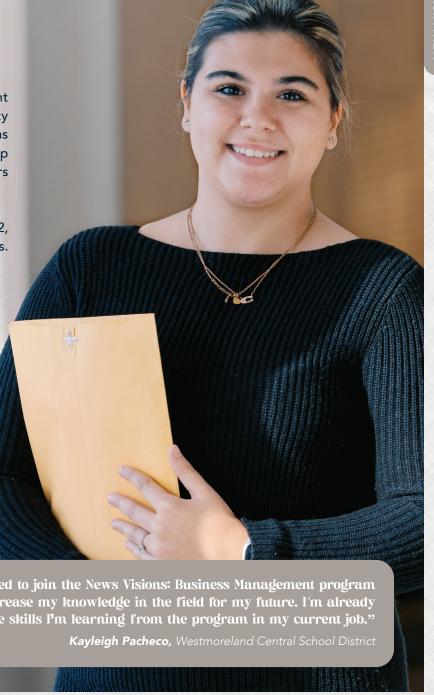


Programs included in the New Visions career cluster offer high school seniors an insider's view of a professional field. With opportunities in Business Management, Communications, Education, Engineering Technology, Health Professions, Legal Professions and Veterinary Science; students participate in internships and observations with local business partners, allowing them to explore careers from the inside out.

Business Management

The New Visions Business Management program offers students the opportunity to explore a variety of business professions at local establishments. Students develop competencies useful in a wide range of careers within the business field.

The program delivers instruction in English 12, Participation in Government, and Economics.



"I wanted to join the News Visions: Business Management program to increase my knowledge in the field for my future. I'm already utilizing the skills I'm learning from the program in my current job."

Communications

The New Visions Communications program gives students the opportunity to work in a variety of communications settings, which include public relations, marketing, journalism, television and radio. The program delivers in the state of the st





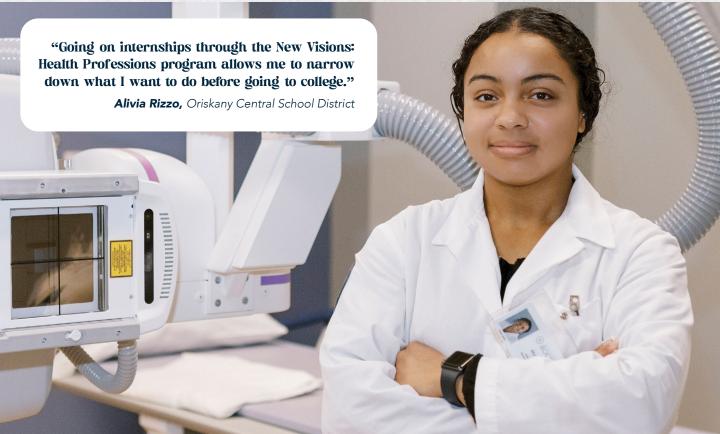


Engineering Technology

New Visions Engineering Technology is an innovative program that gives high school seniors an in-depth look at the different areas of engineering before they enter college. Working with professionals in the field allows students to experience the daily work routine. The program delivers instruction in English 12, Participation in Government, and Economics.

"The New Visions program allows you to get a closer look at the career field you're interested in before you graduate high school."

Steven Zaw Utica City School District



Health Professions

The New Visions Health Professions program is open to seniors who plan to enroll in post-secondary two- or four-year colleges to study in a health-related field. Students in the program explore a variety of health occupations on site at local hospitals and other health facilities. Students develop competencies useful in a wide range of careers within the health field.

Through observations within various departments, students learn what is required of a health professional on a daily basis. The program delivers instruction in English 12, Participation in Government, and Economics.

Additionally, students in New Visions Health receive instruction through MVCC in College Foundations Seminar and Medical Terminology for Health Professionals.



The New Visions programs also offers the opportunity to earn **three college credits** from MVCC in English 101 and the opportunity to secure additional college credits in Personal Finance, **at no cost to students**.



Veterinary Science

This is a one-year program for seniors that offers the students the opportunity to explore the various aspects of veterinary science and the possible career options in the field. General areas of instruction include animal behavior, animal handling and restraint, species and breed identification, animal anatomy and physiology, basic lab techniques, animal care, animal welfare, animal health and disease. Students will participate in internship programs at various types of animal care facilities.

Students wishing to pursue a college education in animal science will have to be exposed to the basic knowledge and terminology needed for majoring in animal science or veterinary medicine. Prerequisites for the class are Living Environment and Chemistry.



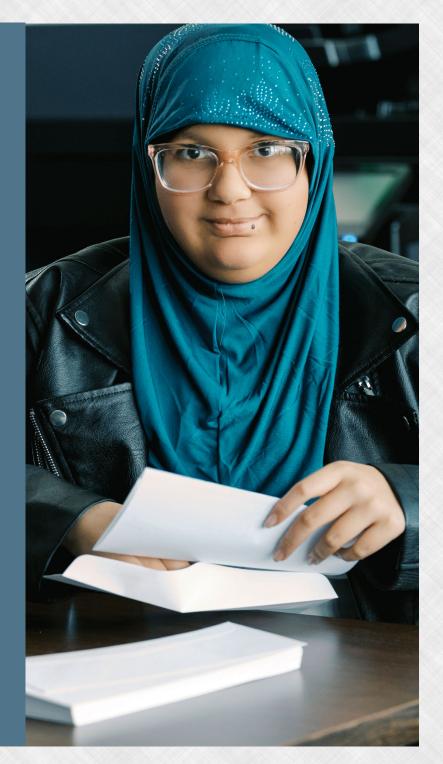
With a focus on basic instruction as well as the opportunity to explore individual abilities and interests, these programs provide students with the skills needed to complete basic hands-on components in the Trades Exploration program as well as prepare food in the Food Service Occupations program. Through Multi-Occupations, students are presented with hands-on tasks in several occupational clusters alongside classroom instruction that stresses the importance of basic academic skills.





Multi-Occupations

Multi-Occupations is a program offering career exploration and skills development to encourage and challenge students to discover their abilities and interests. Hands-on tasks in several occupational clusters provide real work opportunities that may include shadowing and internship experiences. Classroom instruction stresses the importance of basic academic skills. Clusters focus on employability, independent living, social and safety skills to participate within the home and community.





School to Career Programs

The School and Business Alliance utilizes several career development strategies to assist students in making successful transitions from school to post-secondary studies to a successful career: career shadowing, business speakers and tours, college tours and summer work opportunities.

The Regional Program for Excellence internships offer highly motivated high school juniors and seniors opportunities to explore their career choices in a work setting with respected professionals. Students complete 75 hours by receiving release time from their classes to meet with mentors for a weekly three-hour block or during summer months.









Work Experience

ESTABLISHED ARTICULATION AGREEMENTS



Alfred State

Bryant & Stratton

Hilbert College

Mohawk Valley Community College

Paul Smith's College

SUNY Canton

SUNY Cobleskill

SUNY Delhi

SUNY Morrisville

The Culinary Institute of America

The University of Northwestern Ohio

Internships

During school hours, a student may be assigned to observe and participate in a variety of activities related to his/her curriculum at an off-campus site. Students do not receive wages and may not replace a paid employee.

New Visions Internships

Students in the New Visions program typically spend three to four days a week in workplace internships in the business management, communications, education, engineering technology, health, legal and veterinary science fields. One to two days each week is spent in the classroom working on related curriculum projects, listening to guest speakers, or taking virtual field trips.

Direct Job Placement

The Career and Technical Education Center works closely with area businesses to identify students who are prepared for direct job placement, for either full- or part-time work, or summer employment.

CTE Program Credits

Regents Diploma with a Technical Endorsement

Most Career and Technical Education programs at the Oneida-Herkimer-Madison BOCES are approved by the State Education Department. If students successfully complete the CTE program, complete 22 units of high school credits, pass the five required Regents examinations, and pass a technical assessment (which is part of the CTE program), students are eligible to receive the Regents diploma with a technical endorsement.

High School Credit

For each successfully completed year, you can receive four credits. For a one-year program, you can receive four Career and Technical Education (CTE) credits or two CTE credits and, with home school approval, one credit of English 12 and one credit for science. For a two-year program, you can receive eight credits. These can be eight CTE credits or (with home school approval) five, six, or seven CTE credits and up to three academic credits including English 12, math, and science. See your high school counselor for more information.



College Credit Integration

All of the New Visions programs offer three college credits from MVCC for English 101 and Personal Finance. This is at no cost to students. Seniors in Conservation can pay a reduced fee and be eligible to receive three college credits from SUNY Morrisville in their Environmental Science (ENSC 100) course. There are also new dual-credit offerings in several of our programs, including Advertising Design/Multimedia Productions, Construction Trades, Criminal Justice, Culinary Arts, Early Childhood Education, Electricity, Emerging Technologies & Cyber Security and Welding.

Articulation

Through articulation agreements between a post-secondary institution and the Oneida-Herkimer-Madison BOCES, students may gain advanced standing in certain programs and, for others, actual credit for a collegelevel course. The terms of the articulation generally include the following: students must have completed the CTE course within the past school year, maintained a B average or better, demonstrated excellent attendance and received recommendation from the CTE instructor. For more specific information, contact the BOCES CTE counseling department at 315.793.8618 or 315.793.8660. All Career and Technical Education programs have established articulation agreements with local colleges and trade schools.

Clubs & Activities

SkillsUSA

SkillsUSA offers leadership and citizenship development to complement the CTE student's skill training. Members may also participate in local, state and national SkillsUSA competitions.

FFA Conservation Club

The National FFA organization is the oldest vocational organization in the United States and is recognized by the federal government as an important part of vocational education. FFA promotes leadership development through activities that benefit students and the community. Students gain valuable leadership experience toward success in the workforce. Membership is open to any BOCES CTE student.

Advisory Council Representatives

At the Career and Technical Education Center your opinions count. To make sure student perspectives are heard and considered when important decisions are made, two students are selected each year as members of the Career and Technical Education Advisory Council. These students attend all council meetings and actively take part in all discussions.

Honor Society

Each May, outstanding students are inducted into the Career and Technical Honor Society. They are students who have shown excellent academic achievement in their Career and Technical program, good attendance, active participation in organizations, and a serious interest in a vocational or technical field.



Scholarships & Awards

OHM BOCES Career and Technical Education students are eligible to compete for several scholarship and awards thanks to the generous contributions of the following sponsors:

Blue 360

Clinton Tractor

Colleen Perta

Colours Inc.

Delta Kappa Gamma New Visions

Donna Grippe

FFA

King Refrigeration and Air Conditioning

McQuade & Bannigan, Inc.

Michael F. Duniec Memorial

Mohawk Valley Builders Exchange

Mohawk Valley Counselors' Association

MVCC Foundation

OHM BOCES Teachers' Association

Philip T. Dlugolecki

Richard Gerstner Memorial

Richard Marchitelli

Rome Teachers' Federal Credit Union

Sam Cavo

Seed and Weed Garden Club

SkillsUSA

Slocum Dickson Foundation

Steet Ponte

Syracuse Auto Dealers Association





SERVING THE FOLLOWING COMPONENT SCHOOL DISTRICTS

Brookfield | Clinton | Holland Patent | New Hartford | New York Mills | Oriskany Remsen | Sauquoit | Utica | Waterville | Westmoreland | Whitesboro

www.oneida-boces.org/ctec

